

CHAPTER 4

SKU-3/A SEAT SURVIVAL KIT

Section 4-1. Description

4-1. GENERAL.

4-2. The SKU-3/A Seat Survival Kit Assembly is designed for use with the SJU-5/A and SJU-6/A ejection seats. The survival kit serves as a seat for the aircrewmember and a container for the emergency oxygen system, liferaft, and survival items (figures 4-1 and 4-2). The SKU-3/A Seat Survival Kit, less emergency radio beacon actuation lanyard quick-release fittings, life-raft, and survival items, is manufactured by East/West Industries (CAGE 30941) P/N 253J100-1. The entire assembly is supplied by McDonnell Aircraft Company (CAGE 76301) and is identified by P/N 74A800103-1001.

4-3. CONFIGURATION.

4-4. The survival kit is a rigid-type container made of molded fiberglass and contains equipment required for aircrewmember survival after ejection. The survival kit fits into the ejection seat bucket and provides support and a routing for oxygen and communications for the aircrewmember. If an ejection or aircraft oxygen supply failure occurs, the survival kit contains a 50 cubic inch, 1800 psi, emergency oxygen cylinder that provides an emergency supply of oxygen for approximately 10 minutes. The emergency oxygen pressure gage is visible through an opening in the left thigh portion of the snap-on cushion. The lid assembly contains the emergency oxygen equipment. The lower container houses the liferaft, survival equipment, and emergency radio beacon. The two halves of the survival kit are held together by a lock and latch mechanism. The release handle allows the aircrewmember access to the liferaft and survival equipment after ejection.

4-5. Two adjustable harness assemblies (lapbelts) are attached to the survival kit lid. Each harness has a quick-release fitting to attach the survival kit to the

aircrewmember torso harness and two fittings to install the survival kit in the ejection seat bucket. The negative-g strap and fitting attach the survival kit to the ejection seat. The other end of the strap attaches to the torso harness.

4-6. SUBASSEMBLIES. The major subassemblies of the SKU-3/A are:

1. Emergency Oxygen System
2. Upper and Lower Container
3. Handle Release Mechanism
4. Dropline Assembly
5. Cushions
6. Survival Equipment Container
7. Hose Assembly
8. Harness Assembly

4-7. REFERENCE NUMBERS, ITEMS, AND SUPPLY DATA.

4-8. Figures 4-19 through 4-27 contain information on each assembly, subassembly, and component part of the SKU-3/A. The figure and index number, reference or part number, description, and units per assembly are provided.

4-9. APPLICATION.

4-10. The SKU-3/A is a part of the survival equipment used by aircrewmembers aboard the F/A-18A, F/A-18B, F/A-18C BUNO 163427 thru 164067 and F/A-18D BUNO 163434 thru 164068 aircraft.

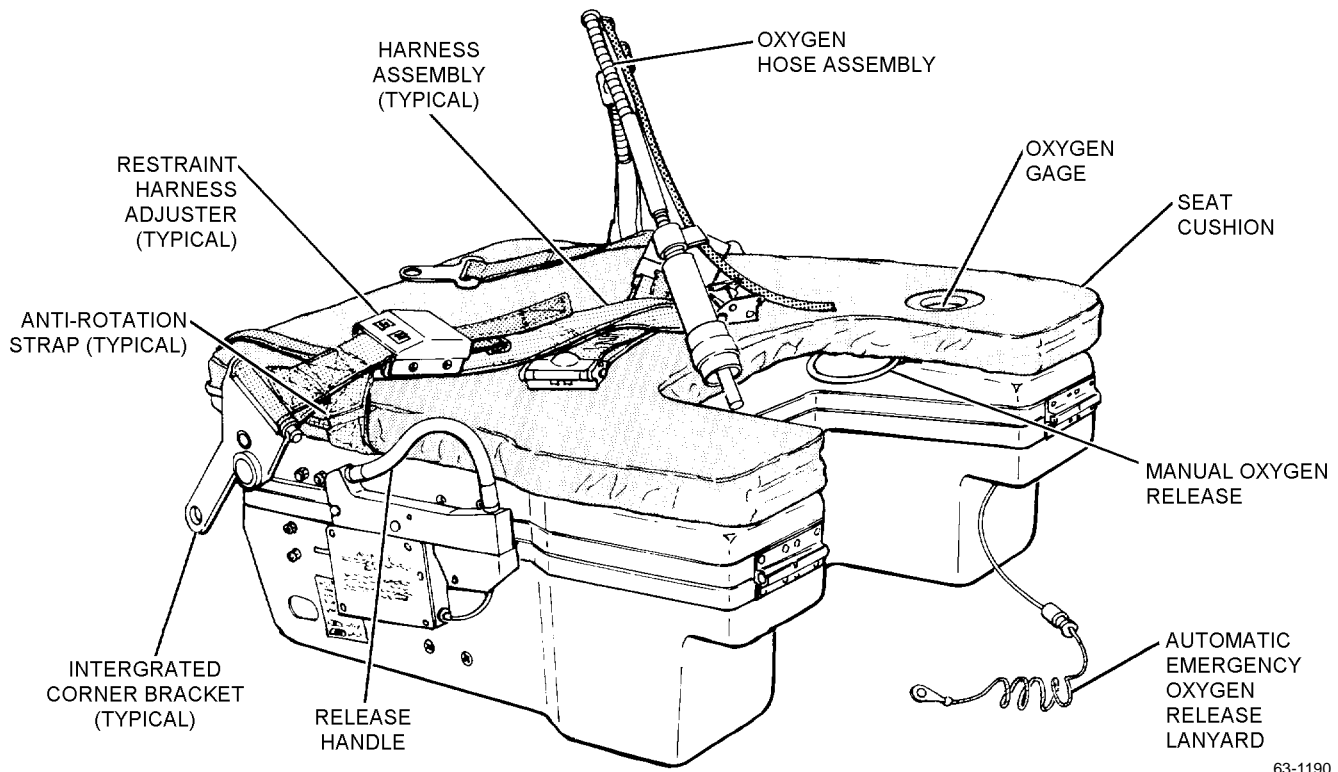


Figure 4-1. SKU-3/A (Closed)

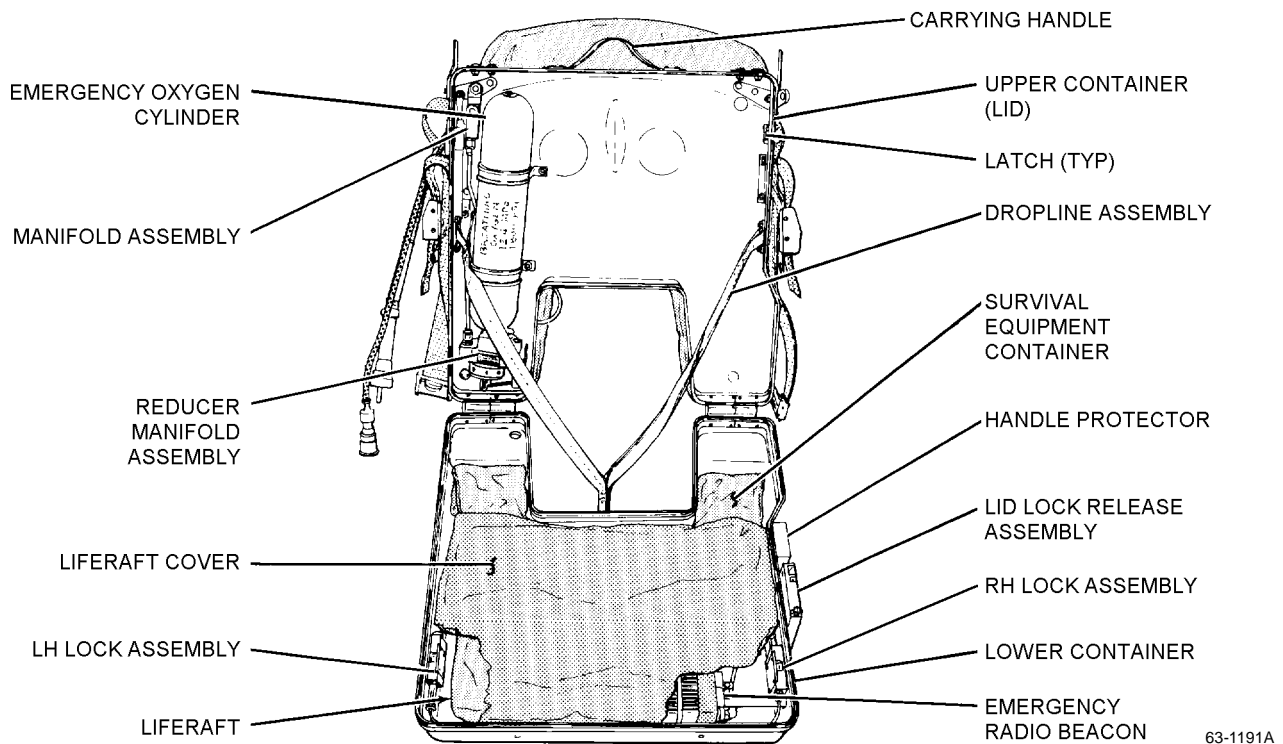


Figure 4-2. SKU-3/A (Open)

4-11. FUNCTION.

4-12. When the aircrewmember ejects from the aircraft, the following events occur:

1. As the ejection seat leaves the aircraft, the personnel parachute sequencing is actuated and the automatic emergency oxygen lanyard actuates the oxygen release assembly providing oxygen to the aircrewmember (figure 4-3).

NOTE

If automatic actuation of the emergency system fails, the system may be actuated by pulling the manual oxygen release handle (green ring) located inboard of the aircrewmember's left knee.

2. Approximately 0.5 second after the drogue gun sear is pulled, the drogue gun fires and deploys the drogue parachutes.

3. If the altitude and/or g conditions are correct after a 1.5-second delay, the time release mechanism fires, releasing the following:

a. Scissor shackle

b. Parachute mechanical lock

c. Drogue shackle

d. Inertia reel straps

e. Lapbelts with survival kit

f. Negative-g strap

g. Leg restraints

4. When the drogue parachutes deploy the personnel parachute, the aircrewmember separates from the seat. The radio beacon actuation lanyard attached to the seat automatically turns on the radio beacon in the survival kit.

5. During descent when survival kit deployment is desired, the aircrewmember pulls the yellow release handle on the right side of the survival kit. The lower container falls away, extracting the dropline from its boots and the liferaft. When the dropline becomes taut, it pulls a lanyard attached to the CO₂ inflation valve which inflates the liferaft.

6. After entering the water, the aircrewmember boards the liferaft and retrieves the lower container and U-shaped survival equipment container which is attached to the dropline by a length of nylon cord.

Section 4-2. Modifications**4-13. GENERAL.**

4-14. There are no modifications to the SKU-3/A required/authorized at this time.

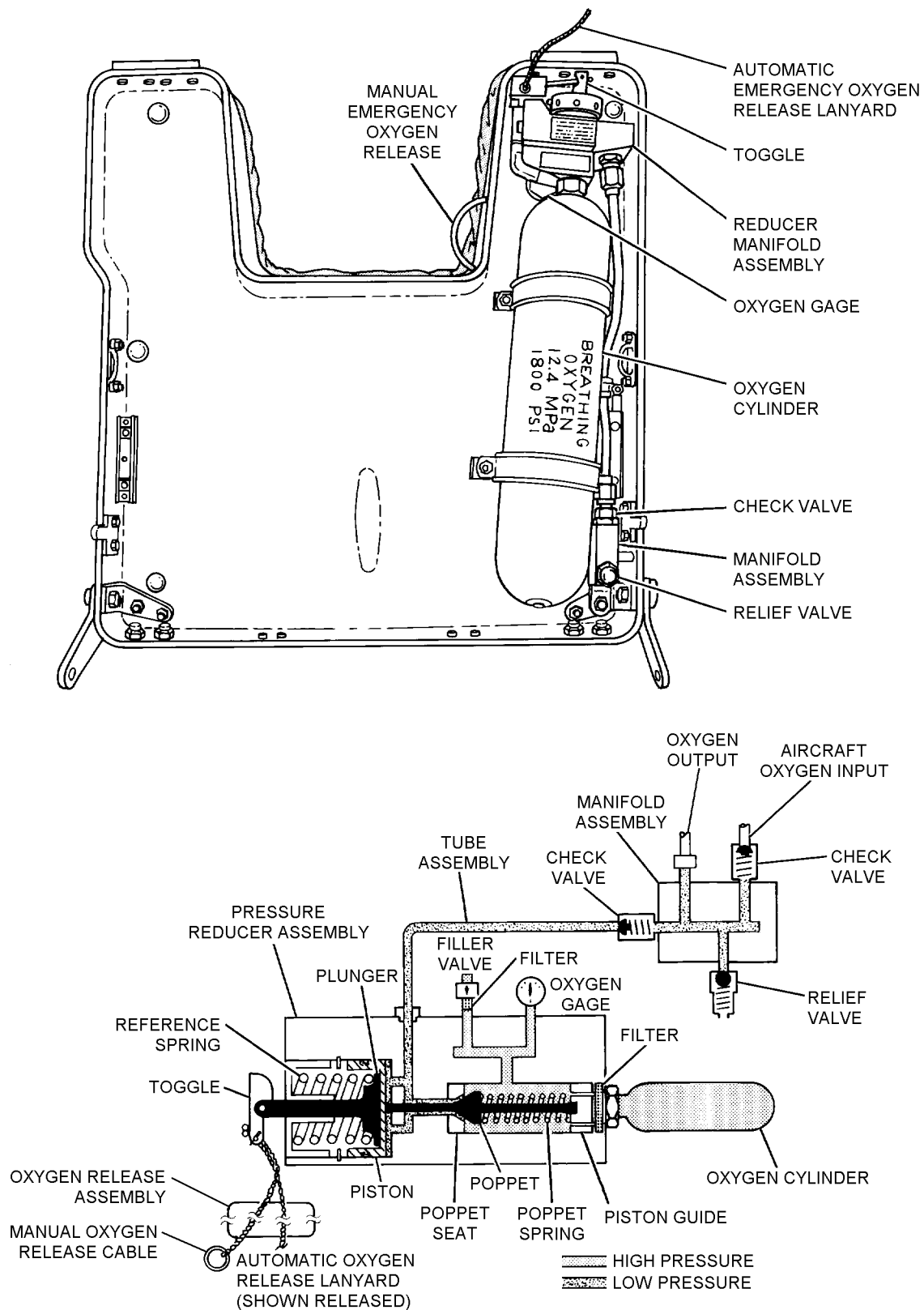


Figure 4-3. SKU-3/A Oxygen System Schematic

63-1192

Section 4-3. Rigging and Packing

4-15. GENERAL.

4-16. Unless operational requirements demand otherwise, rigging and packing of the SKU-3/A shall be accomplished at the Intermediate Level of maintenance by qualified personnel every 448 days.

NOTE

Quality assurance steps are provided for critical operations. When a step is underlined, the Aircrew Survival Equipmentman shall perform the operation and then have performance verified by Quality Assurance (QA).

4-17. RIGGING AND PACKING PROCEDURES.

4-18. Rigging and packing of the SKU-3/A shall be accomplished in eight separate operations as follows:

1. Preliminary Procedures
2. Radio Beacon Rigging and Installation
3. Survival Equipment Binding
4. Survival Equipment Packing
5. Stowing Dropline
6. Liferaft Preparation, Folding, Rigging, and Packing
7. Closing Container

4-19. PRELIMINARY PROCEDURES. The following preliminary procedures shall be accomplished prior to rigging and packing the SKU-3/A.

1. Ensure SKU-3/A and components have been inspected in accordance with [Section 4-5](#).
2. Inspect oxygen hose assemblies in accordance with NAVAIR 13-1-6.3-1.
3. Remove upper container assembly from lower container assembly.

4. Remove liferaft cover. Inspect liferaft cover for damaged fabric and loose, broken, or frayed stitching.

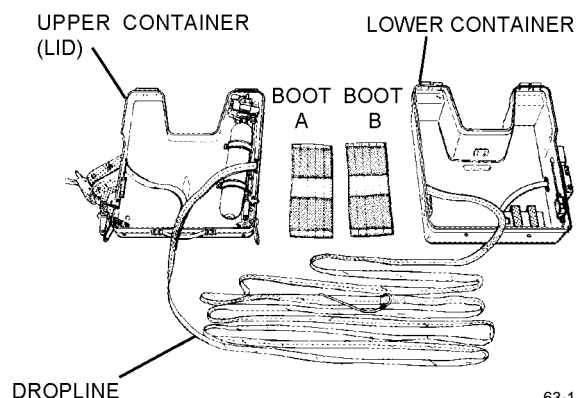
WARNING

CO₂ bottle is under pressure. Use caution when disconnecting CO₂ bottle from liferaft. Do not loosen or attempt to remove inflation valve assembly from CO₂ cylinder.

CAUTION

Ensure actuating line is disconnected from CO₂ cylinder inflation valve before removal of CO₂ cylinder from liferaft.

5. Disconnect CO₂ cylinder from liferaft as follows:
 - a. Carefully remove liferaft from container.
 - b. Disconnect actuation line from CO₂ cylinder.
 - c. Disconnect CO₂ cylinder from liferaft.
 - d. Remove large loop of drop line from CO₂ cylinders neck.
 - e. Ensure anti-chafing disc is installed. Reconnect CO₂ cylinder to liferaft finger tight. If functional test is required torque valve 80 to 90 in-lbs.
6. Ensure liferaft and CO₂ cylinder have been inspected in accordance with NAVAIR 13-1-6.1-1.
7. Remove dropline from boots and align kit components on a clean flat surface as shown.



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Step 7 - Para 4-19

NOTE

A newly fabricated or procured dropline assembly will have a final dimension of 26 feet, 4 inches \pm 2 inches. However, a dropline assembly is subjected to a certain amount of stretch during its stowing process, and shrinkage during its cleaning process, therefore a tolerance of \pm 12 inches is acceptable for an older dropline assembly.

8. Inspect dropline to ensure proper attachment to upper and lower containers. Also ensure dropline length is 26 feet, 4 inches \pm 12 inches.

9. Ensure survival items have been inspected in accordance with NAVAIR 13-1-6.5.

NOTE

Ensure battery service life does not expire prior to the next scheduled inspection cycle of the assembly in which the radio set is installed. Refer to NAVAIR 16-30URT33-1 for battery service life.

10. Remove radio beacon set from kit and ensure that the battery and radio beacon have been inspected in accordance with NAVAIR 16-30URT33-1.

11. Check seat pan and cushion assembly for cuts, tears, and abrasions, and hardware for security of attachment, corrosion, damage, wear, and ease of operation.

4-20. RADIO BEACON RIGGING AND INSTALLATION. To rig and install the AN/URT-33A radio beacon, proceed as follows:

Materials Required		
Quantity	Description	Reference Number
1	Beacon Set, Radio AN/URT-33A	MIL-B-38401A NIIN 00-160-2136
1	Actuator Indicator Assembly	CL204D3-11 (CAGE 80206) NIIN 00-127-5597
1	Pin, Cotter, Hairpin	LHCOTC (CAGE 96652) NIIN 00-956-5635
1	Actuating Lanyard	MBEU 66999-3 (CAGE U1604)
2	Rubber Band, Type I	MIL-R-1832 (CAGE 81349) NIIN 00-568-0323

Support Equipment Required

Quantity	Description	Reference Number
1	T-wrench	Fabricate IAW paragraph 4-70

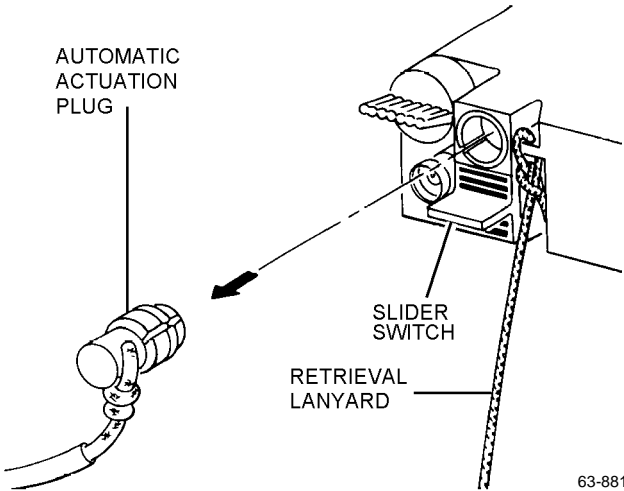
NOTE

Ensure that slider switch on radio beacon is OFF. Slider switch is in OFF position when word ON is not visible on radio beacon housing.

Determine if beacon has been modified in accordance with steps 1 through 3 before proceeding to step 4.

Retain automatic actuation plug with lanyard and metal insert in shop for possible future use.

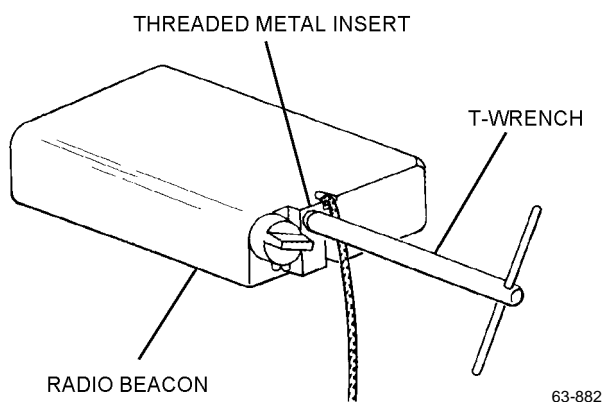
1. Remove automatic actuation plug and lanyard from radio beacon assembly.



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Step 1 - Para 4-20

2. Remove threaded metal insert from beacon using T-wrench. To fabricate T-wrench, refer to [paragraph 4-70](#).



Step 2 - Para 4-20

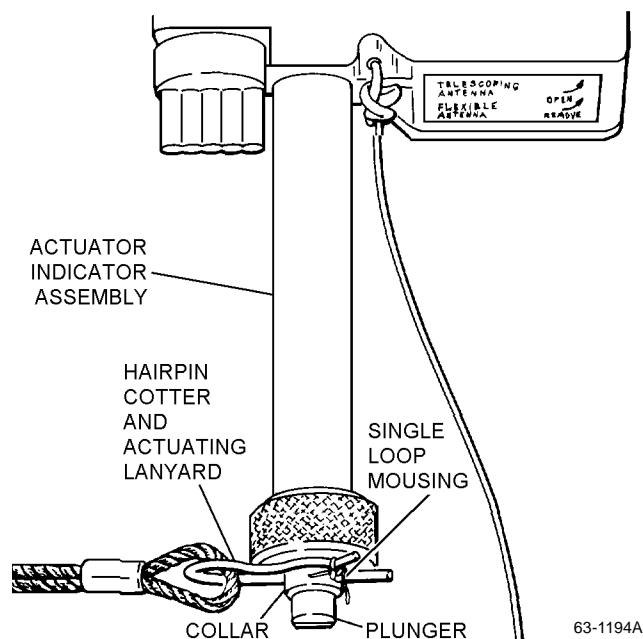
3. Install actuator indicator assembly handtight into radio beacon position from which metal insert was removed.

4. Depress indicator plunger, align holes in plunger and collar, and insert hairpin cotter attached to actuating lanyard.

5. Ensure hairpin cotter and collar are free to rotate 360° without binding. If hairpin cotter and collar are

free to rotate, proceed to [step 6](#). If hairpin cotter and collar do not rotate freely, refer to NAVAIR 16-30URT33-1.

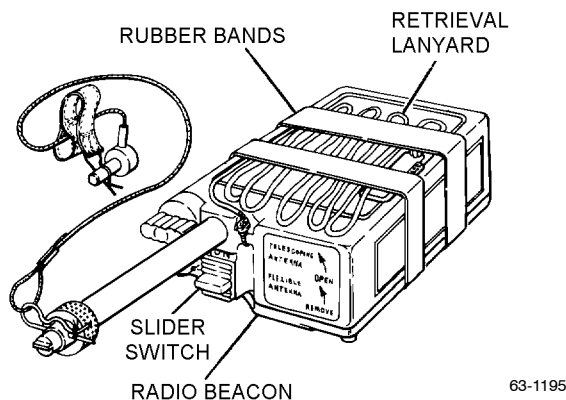
6. Safety-tie open end of actuator indicator hairpin cotter by applying single-loop mousing, using size E nylon thread. Secure mousing loop with square knot. Cut off excess approximately 1/8 inch from knot.



Step 6 - Para 4-20

NAVAIR 13-1-6.3-2

7. Accordion-fold retrieval lanyard on top of radio beacon and secure with rubber bands. Ensure retrieval lanyard is attached at both ends with a bowline knot, with an overhand knot tied at the tag end.



Step 7 - Para 4-20

8. Connect flexible antenna to radio beacon receptacle by pushing bayonet type fitting in and rotating to the right (clockwise).

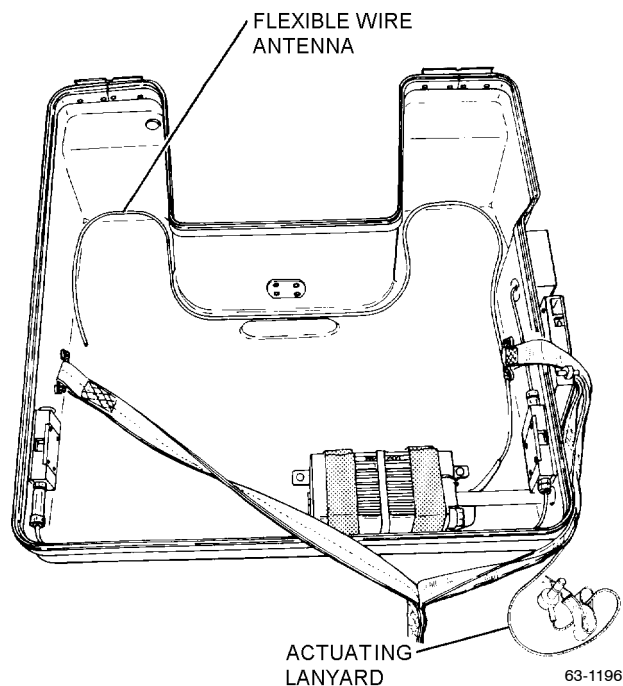
NOTE

Ensure that radio beacon is clear of cords and lanyards.

To prevent accidental transmission of inaudible emergency distress signal, ensure indicator plunger is secure in depressed position before slider ON/OFF switch is placed in ON (armed) position.

9. Place ON/OFF slider switch in the ON (armed) position and install beacon in bracket in lower container of kit. Route opposite end of installed beacon automatic actuation lanyard through opening in container through which actuator must extend. Ensure slider switch is secure in ON position under bracket finger bar, press beacon into position, then secure beacon with hook and pile tape fasteners.

10. Route flexible wire antenna forward around periphery of lower container.



Step 10 - Para 4-20

4-21. SURVIVAL EQUIPMENT BINDING. Ensure all survival items have been inspected in accordance with NAVAIR 13-1-6.5 before binding. To bind survival items, proceed as follows (table 4-1).

NOTE

To prevent loss of survival items, tie them individually and then tie them to a 140-inch length of nylon cord. Nylon cord of the prescribed length required for this procedure shall be seared at both ends to prevent fraying. Refer to table 4-2. All cord used shall be nylon (MIL-C-5040, Type I).

Table 4-1. Survival Kit Items (Note 1)

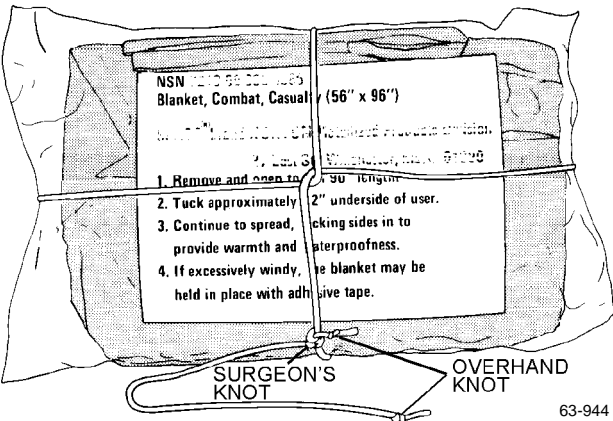
Item Name	Quantity	Reference Number
Cord, (Nylon), Fibrous Type I	50 ft	NAVAIR 13-1-6.5
Signal, (Flare), Smoke and Illumination, MK-13 MOD 0 or MK-124 MOD 0 (Note 2)	2	NAVAIR 13-1-6.5
Sea (Dye) Marker, Fluorescent	2	NAVAIR 13-1-6.5
Sponge, (Bailing), Cellulose Type II, Class 2	1	NAVAIR 13-1-6.5
SRU-31/P Survival Kit, Packet #1 (Medical) (Note 3)	1	NAVAIR 13-1-6.5
SRU-31/P Survival Kit, Packet #2 (General) (Note 3)	1	NAVAIR 13-1-6.5
SRU-31A/P (Note 7)	Optional	NAVAIR 13-1-6.5
Water, Drinking, Canned (Note 4)	1	NAVAIR 13-1-6.5
Bag, Drinking Water (50 ml) (Note 5) or	6	NAVAIR 13-1-6.5
Water, Drinking, Emergency (118 ml) (Note 5)	3	NAVAIR 13-1-6.5
Opener, Can, Hand (Note 6)	1	NAVAIR 13-1-6.5
Ground/Air Emergency Code Card	1	NAVAIR 13-1-6.5
Blanket, (Combat) Casualty, (3 oz)	1	NAVAIR 13-1-6.5
Envelope, Packing List	2	NAVAIR 13-1-6.5
Beacon Set, Radio	1	NAVAIR 13-1-6.5
Liferaft, Inflatable	1	NAVAIR 13-1-6.1-1
<p>Notes: 1. The items listed are typical and are considered mandatory for inclusion in the survival kit container. Deviation from the listed items may be required by certain Functional Air Wings (FUNCWINGS), Carrier Air Wings (CVW), COMFAIRS, or Marine Air Wings (MAW). Requests for deviations must be forwarded to and authorized by TYCOMS and with information to Fleet Support Team (FST) at NAVAIRWARCENACDIV Patuxent River MD via Naval Message. When optional items are substituted, particular attention must be paid to the binding sequence so that physical sizes and binding order of substituted items remain approximately the same. That portion of an item name in parentheses is a common-use name or container size and is not intended for supply requisition purposes.</p> <p>2. MK-13 MOD 0 shall be used until stocks are depleted. MK-124 MOD 0 will replace MK-13 MOD 0 as stocks become available.</p> <p>3. SRU-31/P complete kits including Medical Packet (#1) and General Packet (#2) may be ordered; instructions for packing and ordering these kits are found in NAVAIR 13-1-6.5.</p> <p>4. When the supply for emergency canned water has been exhausted use bagged drinking water.</p> <p>5. If Bag, Drinking Water (50 ml), is not available, substitute Water, Drinking, Emergency (118 ml), in accordance with NAVAIR 13-1-6.5.</p> <p>6. If canned water is not being used there is no need to pack can opener.</p> <p>7. The selection of SRU-31/P or SRU-31A/P Individual Aircrewmember's Survival Kit will be at the discretion of the TYPE COMMANDER depending on mission requirements, reference NAVAIR 13-1-6.5, Chapter 9, for detailed information.</p>		

Table 4-2. Nylon Cord Lengths Required for Binding

Length (Inches)	Number Required
140	1
12 (Note 1)	5
30	1
36	2
40	3
50 (Note 1)	1

Notes: 1. When using bagged water in place of canned emergency water, the number of required 12 inch lengths will be a total of 6 and the required 50 inch lengths will be a total of 0.

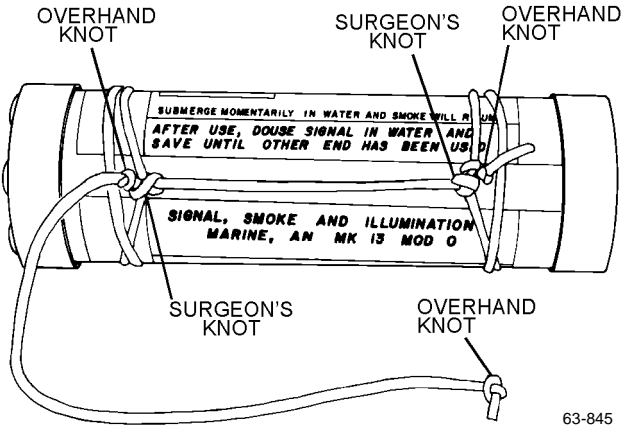
1. Tie overhand knot in each end of a 40-inch length of nylon cord. Wrap cord around combat casualty blanket. Rotate cord 1/4 turn as shown and wrap cord ends around opposite side of blanket. Tie with surgeon's knot. Ensure that overhand knot is snugly against surgeon's knot.



Step 1 - Para 4-21

2. Tie overhand knot in both ends of a 36-inch piece of nylon cord. Wrap one end of cord two overlapping turns around end of one signal flare and tie with surgeon's knot positioned snugly against cord-end overhand knot.

3. Route cord to opposite end of signal flare. Wrap cord two overlapping turns around end of flare and tie with surgeon's knot followed by an overhand knot positioned snugly against surgeon's knot. Cord between end-ties shall be drawn tight.



Step 3 - Para 4-21

4. Tie second signal flare in same manner as steps 2 and 3.

5. Tie overhand knot near both ends of a 12-inch piece of nylon cord. Pass overhand knot through center grommet in dye marker and tie a bowline knot, allowing an approximate 1-inch loop. Bowline knot should be snugly against overhand knot.



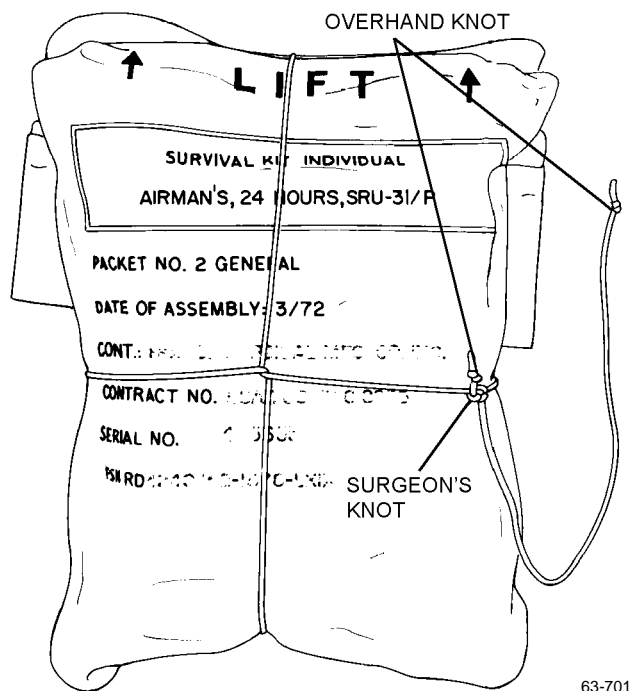
Step 5 - Para 4-21

6. Tie second sea dry marker in same manner as step 5.

NOTE

SRU-31/P Packet #1 (Medical) shall be folded approximately in half prior to tying.

7. Tie overhand knot in both ends of a 40-inch length of nylon cord. Wrap cord around one SRU-31/P packet until both ends meet; then rotate cord 1/4 turn and wrap cord ends around opposite sides of packet. Tie with surgeon's knot with cord-end overhand knot positioned snugly against surgeon's knot.

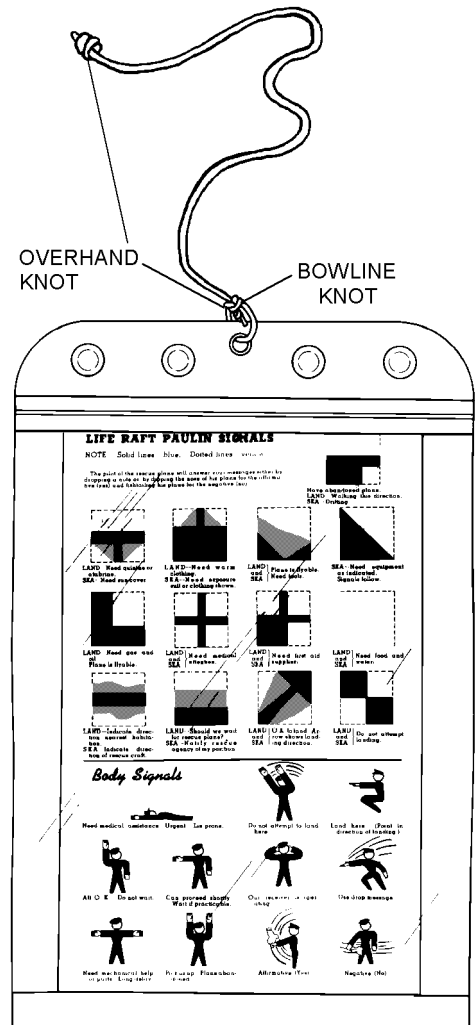


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Step 7 - Para 4-21

8. Secure second SRU-31/P packet in same manner as step 7.

9. Place Ground/Air Emergency Code Card into clear vinyl plastic envelope (MIL-B-117) and close sealing slide fastener. Using 12-inch piece of nylon cord, tie overhand knot on each end and pass knot through center hole in envelope. Secure with bowline knot, allowing an approximate 1-inch loop. Position cord-end overhand knot snugly against bowline knot.

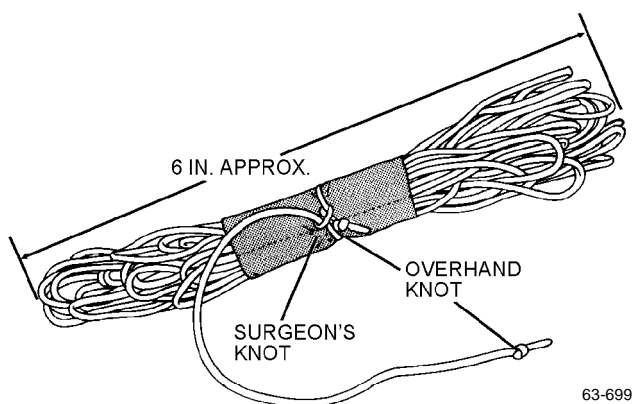


63-700

Step 9 - Para 4-21

NAVAIR 13-1-6.3-2

10. Cut one 2 x 3-inch piece of nylon duck material. Accordion-fold 50-foot length of nylon cord in 6-inch bights, and wrap material around center of accordion folded cord. Using 12-inch piece of nylon cord, tie overhand knot near each end and secure one end of cord to center of material with surgeon's knot. Position cord-end overhand knot snugly against surgeon's knot.



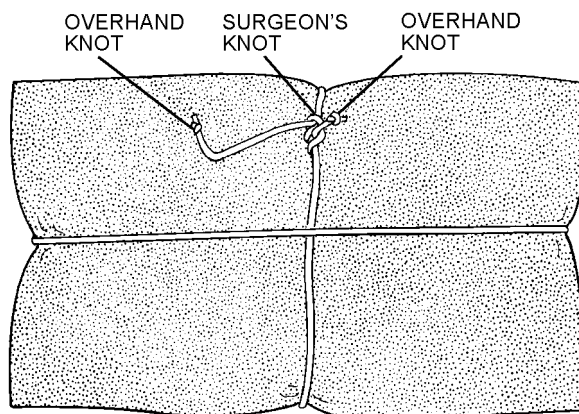
Step 10 - Para 4-21

11. Tie overhand knot in each end of a 12-inch length of nylon cord. Pass overhand knot through hole in can opener, and tie a bowline knot with 1-inch loop. Ensure that overhand knot is snugly against bowline. Wrap pointed end of can opener with chafing material and secure in place with a rubber band.

NOTE

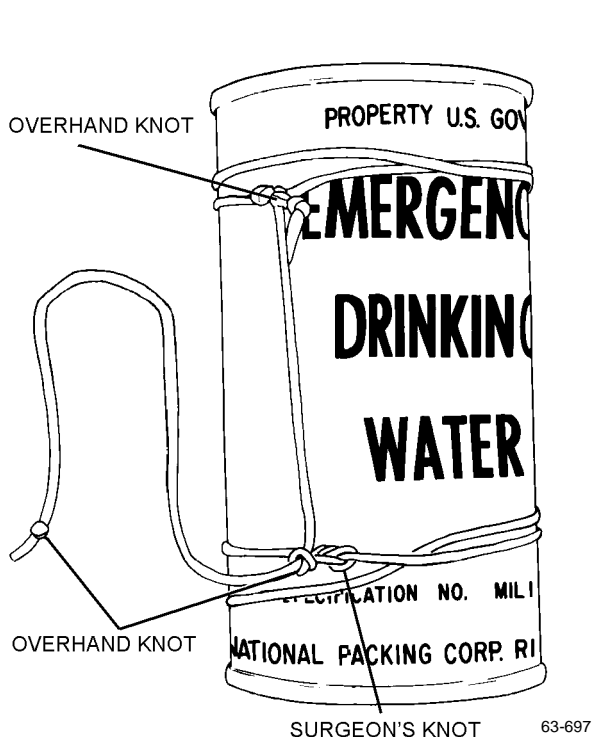
The bailing sponge should be compressed to a minimum thickness by compressing while damp and then allowing to dry in the compressed state before tying.

12. Tie overhand knot near ends of a 30-inch length of nylon cord. Wrap cord around sponge until both ends meet; then rotate cord 1/4 turn and wrap cord ends around opposite sides of sponge. Tie with a surgeon's knot with cord-end overhand knot positioned snugly against surgeon's knot.



Step 12 - Para 4-21

13. Tie overhand knot near both ends of a 50-inch piece of nylon cord. Wrap one end of cord two overlapping turns around end of canned water and tie with surgeon's knot positioned snugly against cord-end overhand knot. Route cord to opposite end of can. Wrap cord two overlapping turns around end of can and tie with surgeon's knot followed by an overhand knot positioned snugly against surgeon's knot. Cord between end-ties shall be drawn tight.

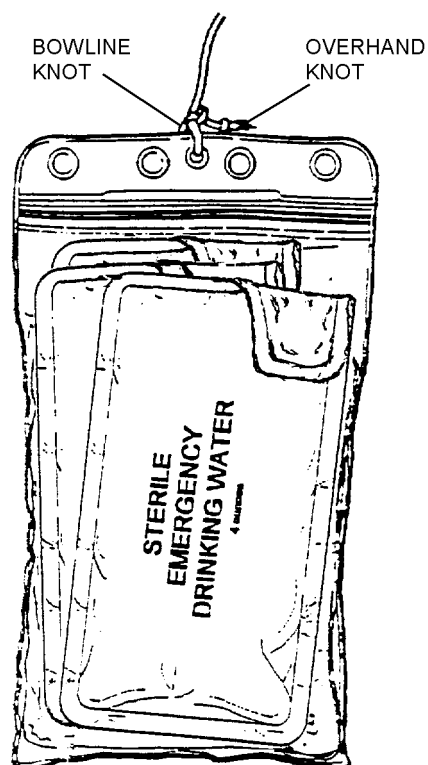


Step 13 - Para 4-21

NOTE

Replacement rate of exhausted canned water shall be in accordance with the NAV-AIR 13-1-6.5 manual. Bagged emergency drinking water shall be stowed in the same order as canned emergency water. The bags of water shall be stowed in a flat configuration.

14. Bagged water. Place a maximum of three 4-ounce bagged emergency drinking water flat inside a clear vinyl envelope (MIL-B-117) with pour spout folded down. Bagged water must be able to fit into envelope without disrupting the closure of the sealing slide fastener. Using a 12-inch length of cord, tie an overhand knot on each end and pass knot through center hole in envelope. Secure with bowline knot, allowing an approximate 1-inch loop. Position an overhand knot snugly against the bowline knot. Ensure overhand knot is snug against surgeon's knot.



Step 14 - Para 4-21

15. Using the 140-inch length of Type I nylon cord, form a 3/4 to 1-inch overhand loop knot approximately 12 inches from one end. Continue making these loops every 5 inches until a total of 12 loops are completed. Ensure 25 (± 1) inches of cord remains after tying the last overhand loop knot.

NOTE

Tie survival items to 140-inch cord in the order shown in [figure 4-4](#).

16. Tie each item to a loop using a surgeon's knot with cord-end overhand knot positioned snugly against surgeon's knot.

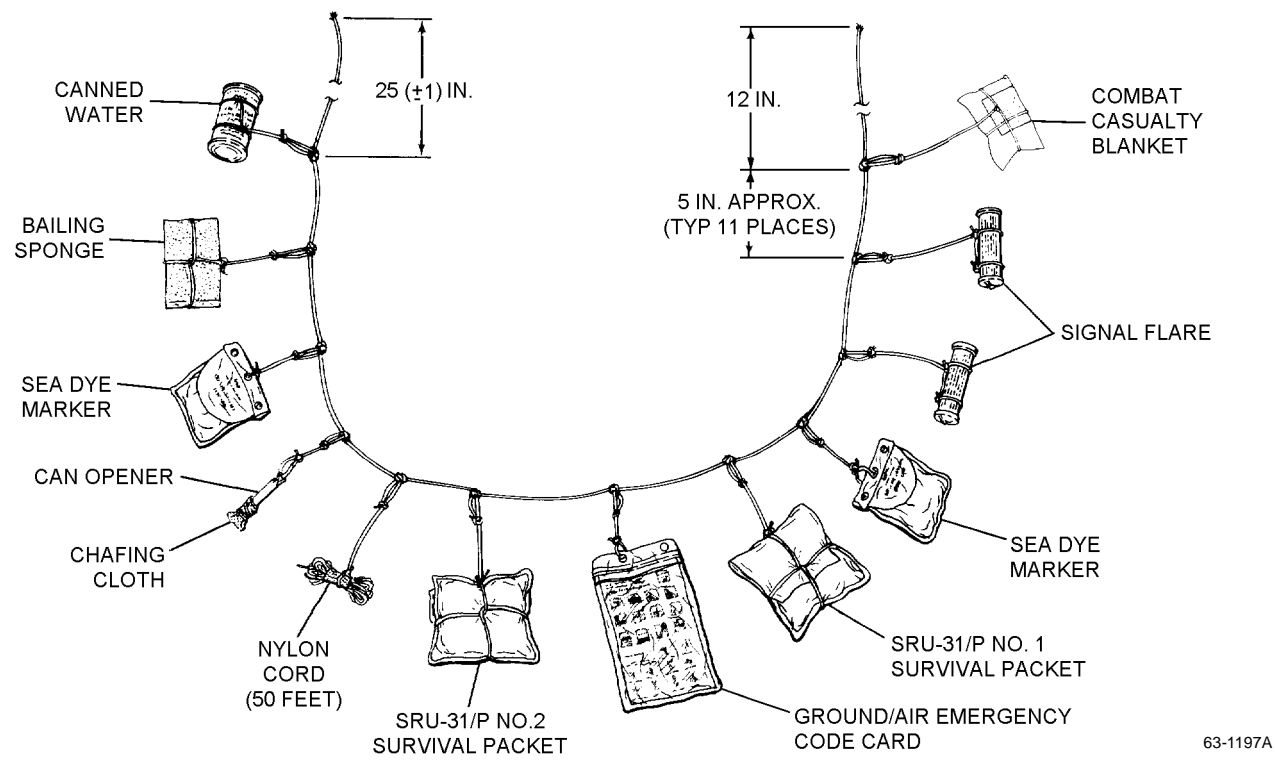


Figure 4-4. Binding Survival Items

4-22. SURVIVAL EQUIPMENT PACKING. To pack survival equipment into equipment container, proceed as follows:

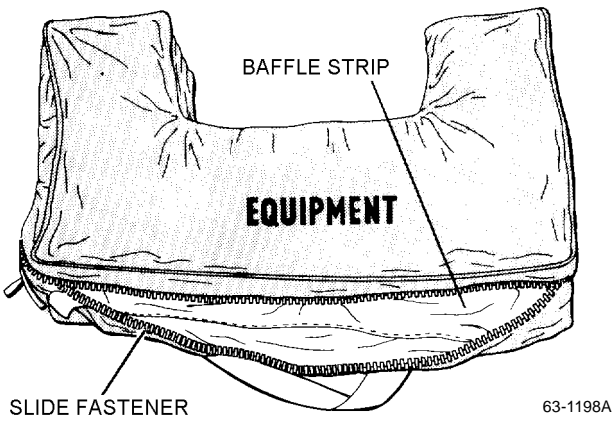
1. Position equipment container on table with slide fastener facing packer and the word EQUIPMENT on top. Open slide fastener from right to left.

Materials Required

Quantity	Description	Reference Number
As Required	Cord, Nylon, Type III 550 pound	MIL-C-5040 NIIN 00-240-2146
	Thread, Nylon, Type II, Class A, Size E	V-T-295 NIIN 00-244-0609

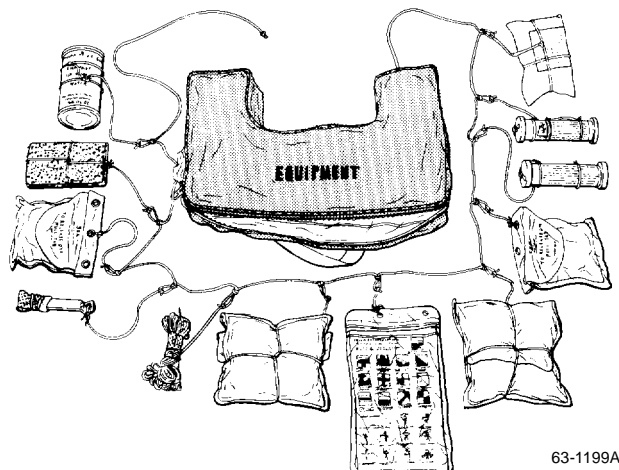
NOTE

No item has a top or bottom designation; however, its longitudinal axis may be important.



Step 1 - Para 4-22

2. Position bound items to be packed in front of survival package.



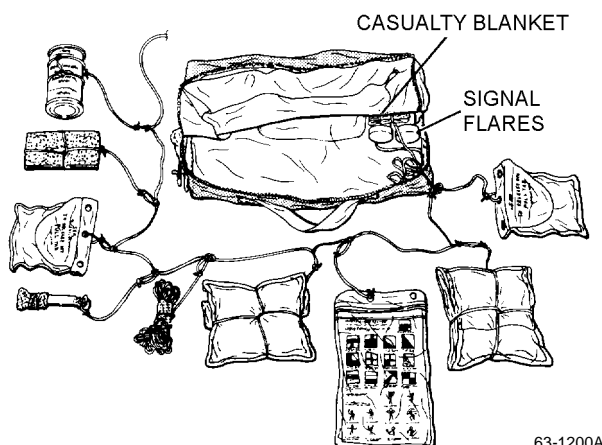
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Step 2 - Para 4-22

3. Insert 12-inch bitter end (closest to casualty blanket) of 140-inch nylon cord through loop in forward right leg portion of equipment container. Tie with a 2-inch loop bowline knot and an overhand knot. Ensure that overhand knot is snugly against bowline.

4. Stow bound survival items into equipment container as follows:

a. Stow two signal flares in right leg pocket of equipment container. Position flares so that their longitudinal axes are perpendicular to slide fastener. Position casualty blanket on top of signal flares.



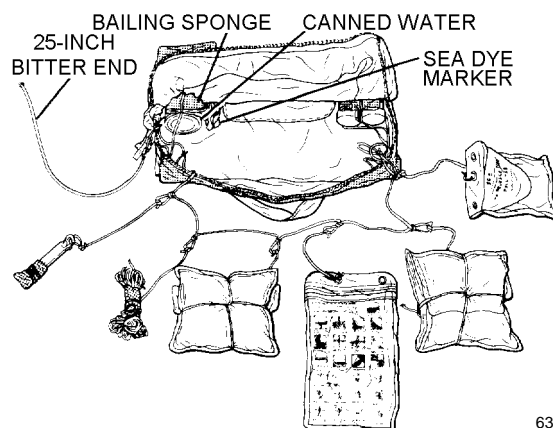
63-1200A

Step 4a - Para 4-22

NOTE

Ensure that the 25 (± 1)-inch bitter end (closest to the canned water) of the 140-inch nylon cord remains extended outside equipment container.

b. Stow canned water in aft leg of equipment container so that longitudinal axis is perpendicular to slide fastener. Stow sea dye marker next to canned water and place bailing sponge on top of canned water.



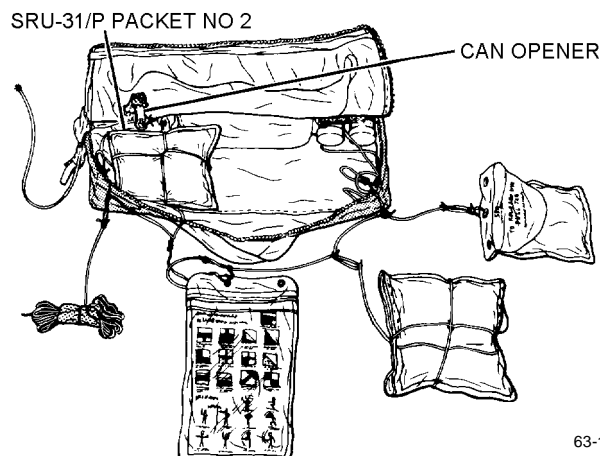
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Step 4b - Para 4-22

NOTE

Ensure that chafing material is secure around pointed edge of can opener so can opener will not damage survival items.

c. Place can opener, point aft and down between water can and sea dye marker. Place SRU-31/P Packet #2 along aft end of equipment container so that longitudinal axis is parallel to slide fastener.

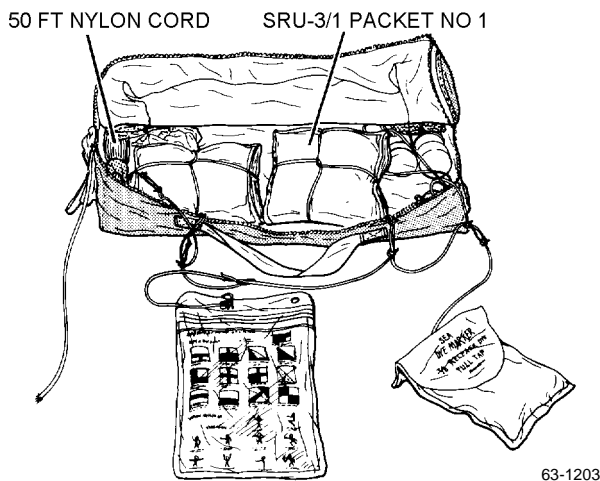


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Step 4c - Para 4-22

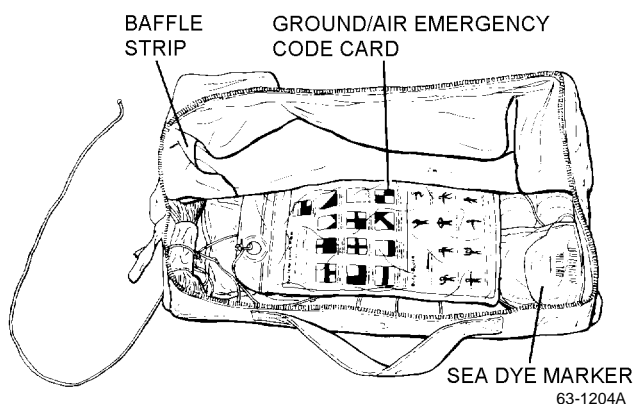
NAVAIR 13-1-6.3-2

d. Stow SRU-31/P Packet #1 to right of SRU-31/P Packet #2 so that longitudinal axis is parallel to slide fastener. Stow the 50 feet of nylon cord to left of SRU-31/P Packet #2 so that longitudinal axis is perpendicular to slide fastener.



Step 4d - Para 4-22

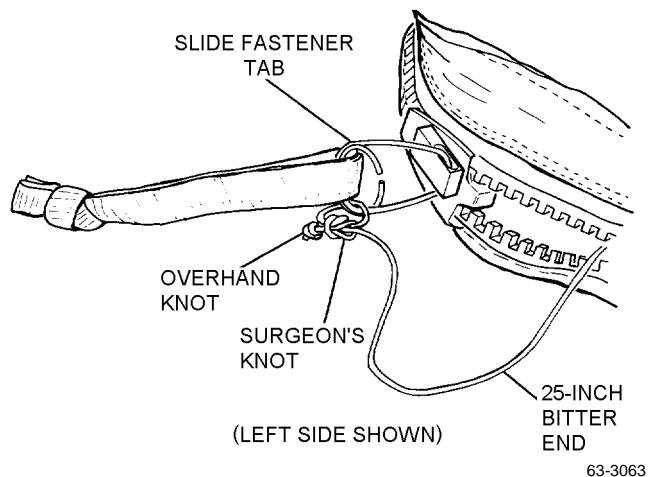
e. Stow sea dye marker to right of SRU-31/P Packet #1. Place Ground/Air Emergency Code Card in center section of equipment container on top of SRU-31/P Packet #1 so that longitudinal axis is parallel to slide fastener.



Step 4e - Para 4-22

f. Ensure that survival items are properly stowed and that the 25 (±1)-inch bitter end is extended out the side of equipment container.

g. Tie 25 (±1)-inch bitter end to the slide fastener tab with a surgeon's knot. Position cord-end overhand knot snugly against surgeon's knot.



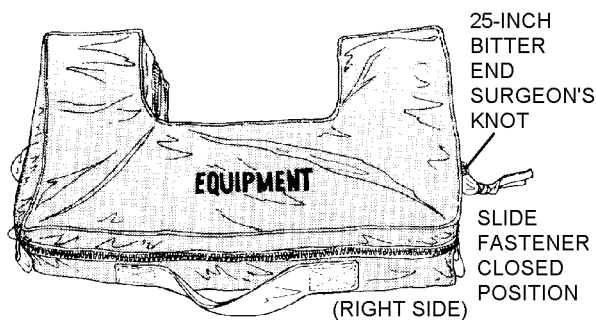
Step 4g - Para 4-22

h. Pull baffle strip (step 4e) down and position it between stowed equipment and slide fastener.

NOTE

Ensure nylon cord does not become caught in slide fastener.

i. Move slide fastener to right side to close equipment container.



Step 4i - Para 4-22

5. Place equipment container (with word EQUIPMENT up) in forward section of lower container.

NOTE

Ensure that radio beacon is clear of cords and lanyards.

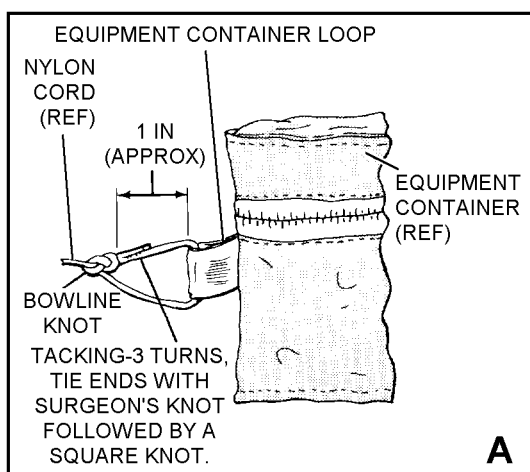
6. To connect equipment container to dropline, see figure 4-5 and proceed as follows:

- a. Cut a 52 (± 1)-inch length of Type III nylon cord and sear ends.
- b. Attach midpoint of cord with a lark's head knot at a point just above inverted V of dropline.
- c. Secure cord to left side web loop of equipment container using a bowline knot (figure 4-5).
- d. Secure cord to right side web loop of equipment container in same manner as step c above.

NOTE

All tacking cord shall be coated with a mixture of 50% beeswax and 50% paraffin. The cord may be dipped in a melting pot 160° to 200°F or drawn across a solid block of the mixture.

- e. Tack bitter end of bowline knots (in steps c and d above) at each equipment container loop (figure 4-5). Tack with 3 turns of size E nylon thread, single. Tie thread ends with surgeon's knot followed by a square knot.



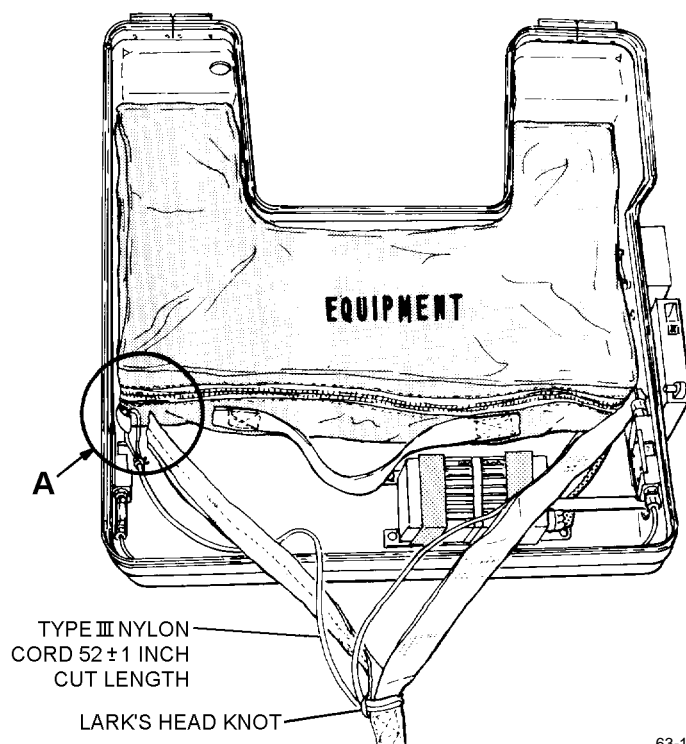
4-23. STOWING DROPLINE. To stow dropline in boots, proceed as follows:

NOTE

Stowage boots are referred to as boot A and boot B for identification purposes only. There are no physical differences between boots and the letters A and B do not actually appear on them.

Numbers on stowage channels of boots correspond to dropline bights and the order in which they are to be stowed. Numbers appear in illustration for clarity; they do not actually appear on stowage boots. To fabricate boots, refer to paragraph 4-72.

The identification yarn on earlier fabricated dropline assemblies may be located on the underside of the webbing. This is not considered a safety of flight. However, procedural steps depicting identification yarn location will be reversed throughout the dropline stowage procedures for these assemblies. Future fabrication of the dropline for the SKU-3/A will be in accordance with paragraph 4-73.



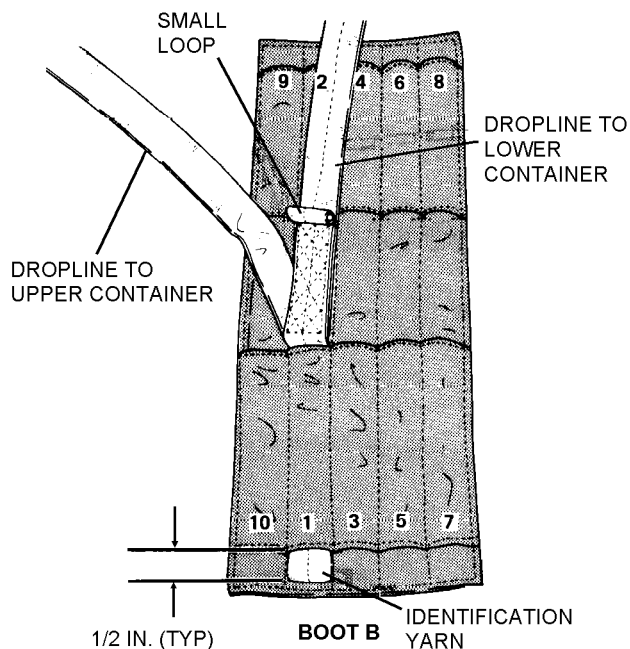
63-1206A

Figure 4-5. Stowed Survival Equipment Container

NAVAIR 13-1-6.3-2

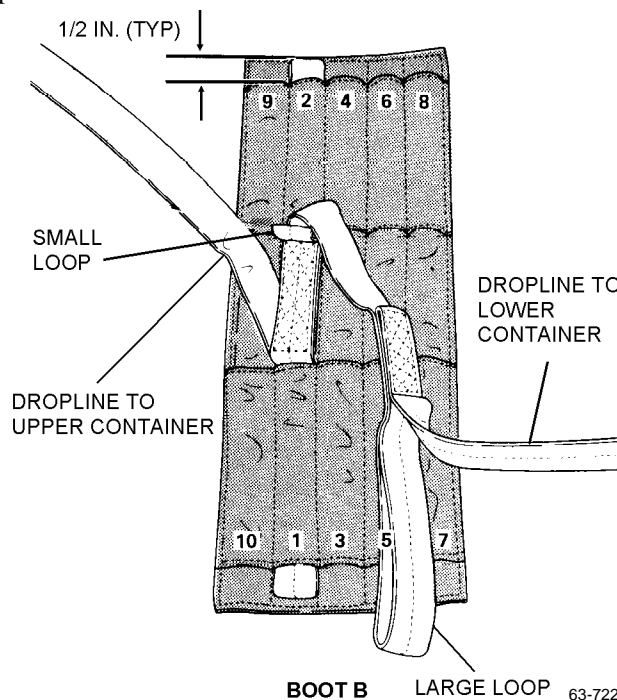
1. Lay dropline out flat between container halves with dropline loops up. Remove all twists from dropline prior to beginning stowing operation.

2. Position boot B to the left of lower container. Form the first bight 5 ± 1/2 inches from base of small loop stitching. Bight shall be in portion of dropline going to upper container and small loop shall face up. Stow bight in channel 1 of boot B. Push bight into channel with a 7-inch length of 3/8-inch hardwood dowel tapered at one end. There shall be a 1/2-inch protrusion at end of channel and identification yarn shall be visible at protrusion.



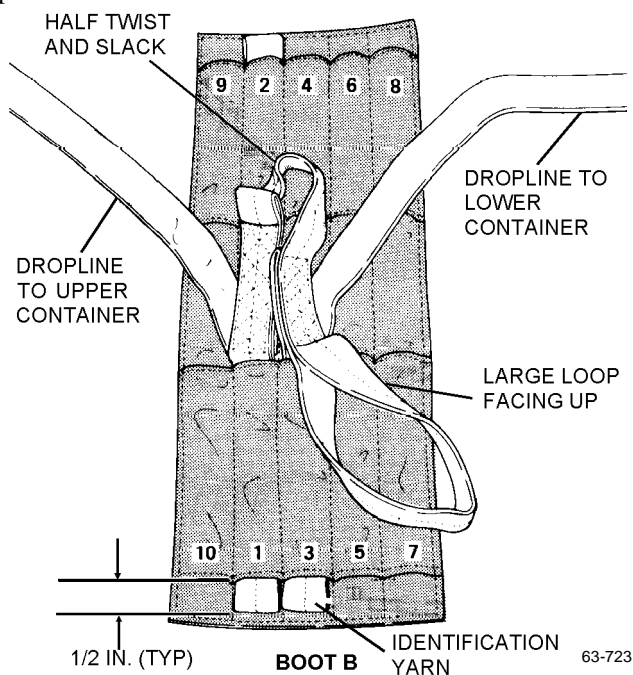
Step 2 - Para 4-23

3. Second bight shall be formed in portion of dropline going from small loop and shall be stowed in channel 2. Identification yarn shall not show at protrusion.



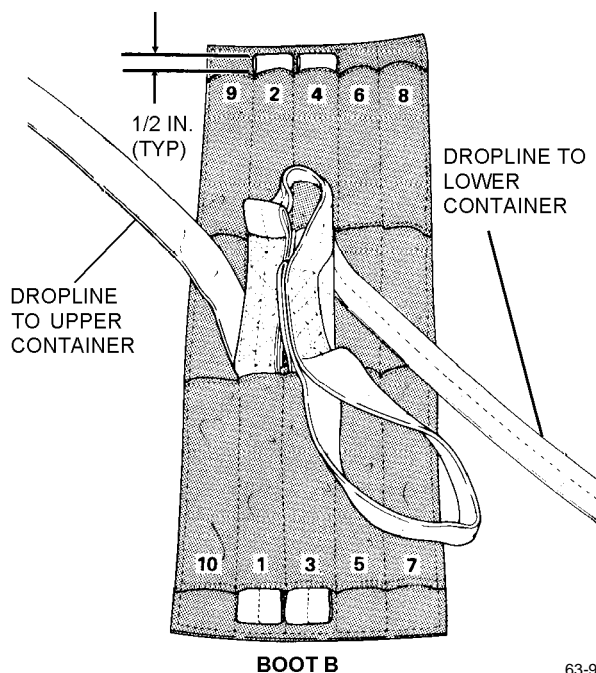
Step 3 - Para 4-23

4. Place a half-twist in dropline by rotating clockwise so that large loop faces up. Stow third bight in channel 3. A small amount of slack may exist between bights 2 and 3. Identification yarn shall be visible at protrusion.



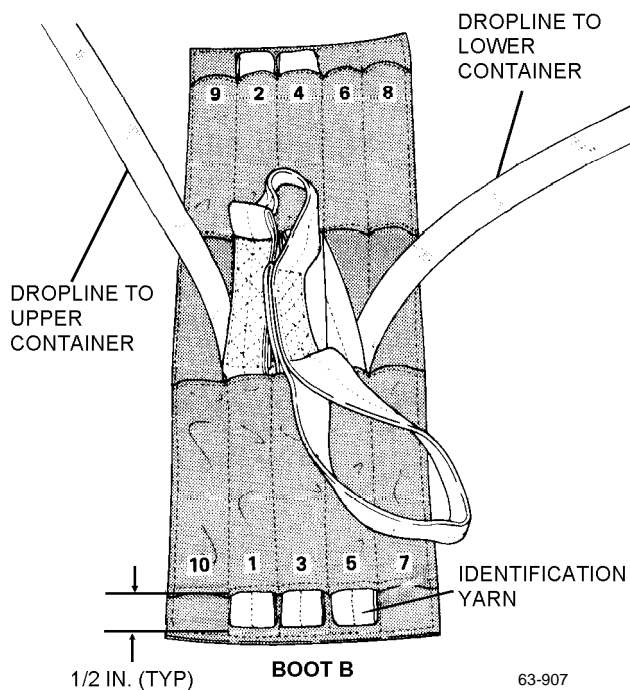
Step 4 - Para 4-23

5. Stow fourth bight in channel 4, ensuring that identification yarn does not show at protrusion.



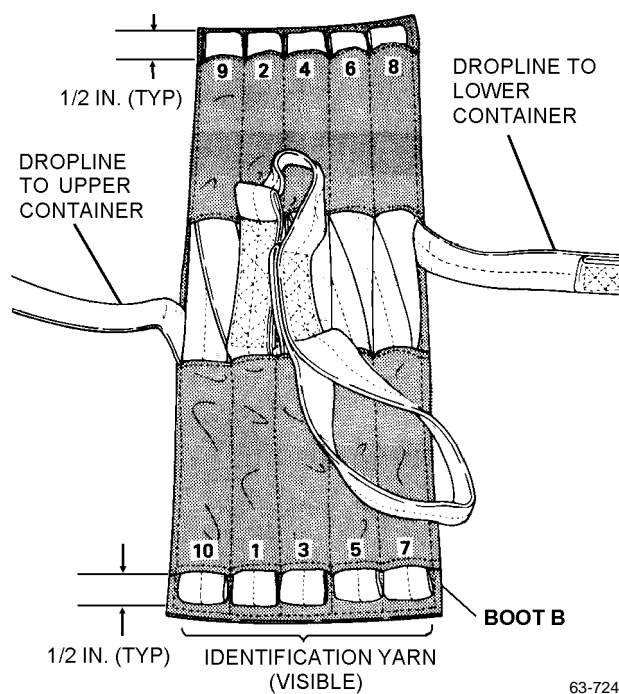
Step 5 - Para 4-23

6. Stow fifth bight in channel 5, ensuring that identification yarn is visible at protrusion.



Step 6 - Para 4-23

7. Stow remainder of dropline in boot B in accordance with numbering sequence on boot as shown, maintaining 1/2-inch protrusion. If there is insufficient line, due to allowable tolerance in length of dropline, a full stow may not be possible in channel 8.



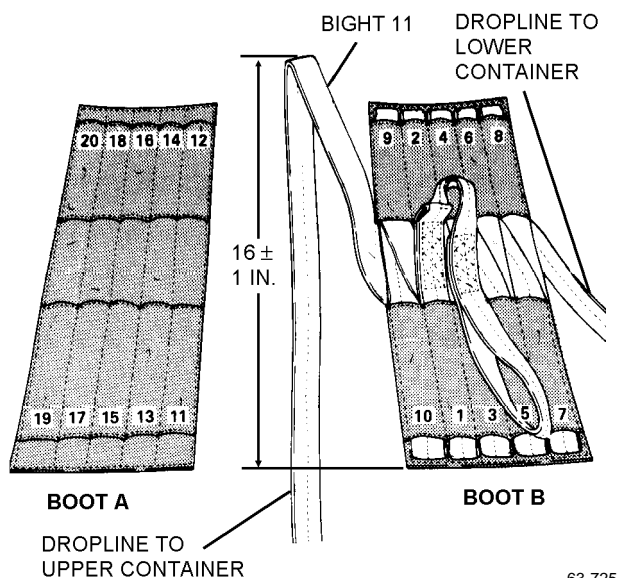
Step 7 - Para 4-23

NOTE

Upon the completion of [step 7](#), identification yarn shall be visible at channels 1, 3, 5, 7 and 10, and shall not show at channels 2, 4, 6, 8 and 9.

NAVAIR 13-1-6.3-2

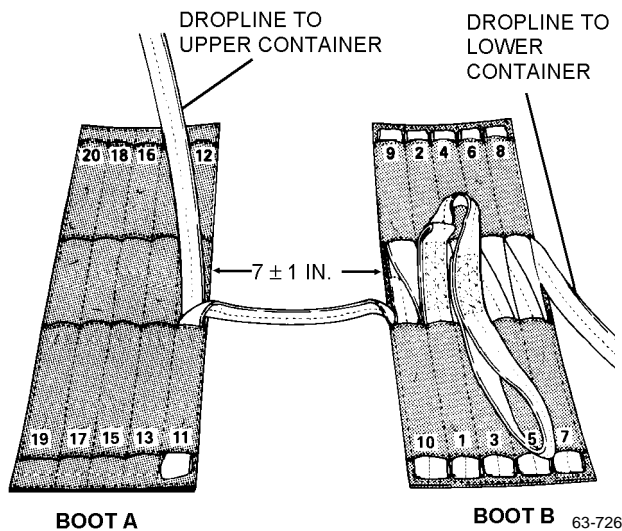
8. Form bight 11 in dropline 16 \pm 1 inch from bottom of last bight (bight 10) in boot B.



63-725

Step 8 - Para 4-23

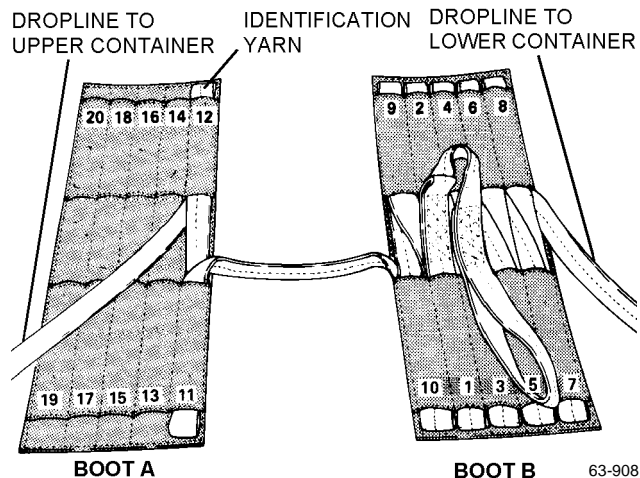
9. Stow bight 11 (formed in [step 8](#)) in channel 11 of boot A. There shall be 7 \pm 1 inch of dropline between boots A and B when bight 11 is stowed. Identification yarn shall not show at protrusion.



63-726

Step 9 - Para 4-23

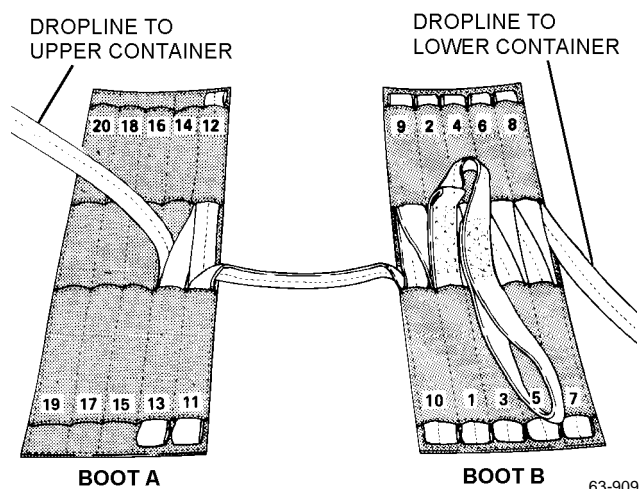
10. Stow bight 12 in channel 12 of boot A. Identification yarn shall be visible at protrusion.



63-908

Step 10 - Para 4-23

11. Stow bight 13 in channel 13. Identification yarn shall not show at protrusion.



63-909

Step 11 - Para 4-23

12. Continue stowing bights in boot A until all line is stowed. Maintain 1/2-inch protrusion ([figure 4-6](#)).

NOTE

Upon the completion of [step 12](#), identification yarn shall be visible at channels 12, 14, 16, 18 and 20 and shall not show at channels 11, 13, 15, 17 and 19.

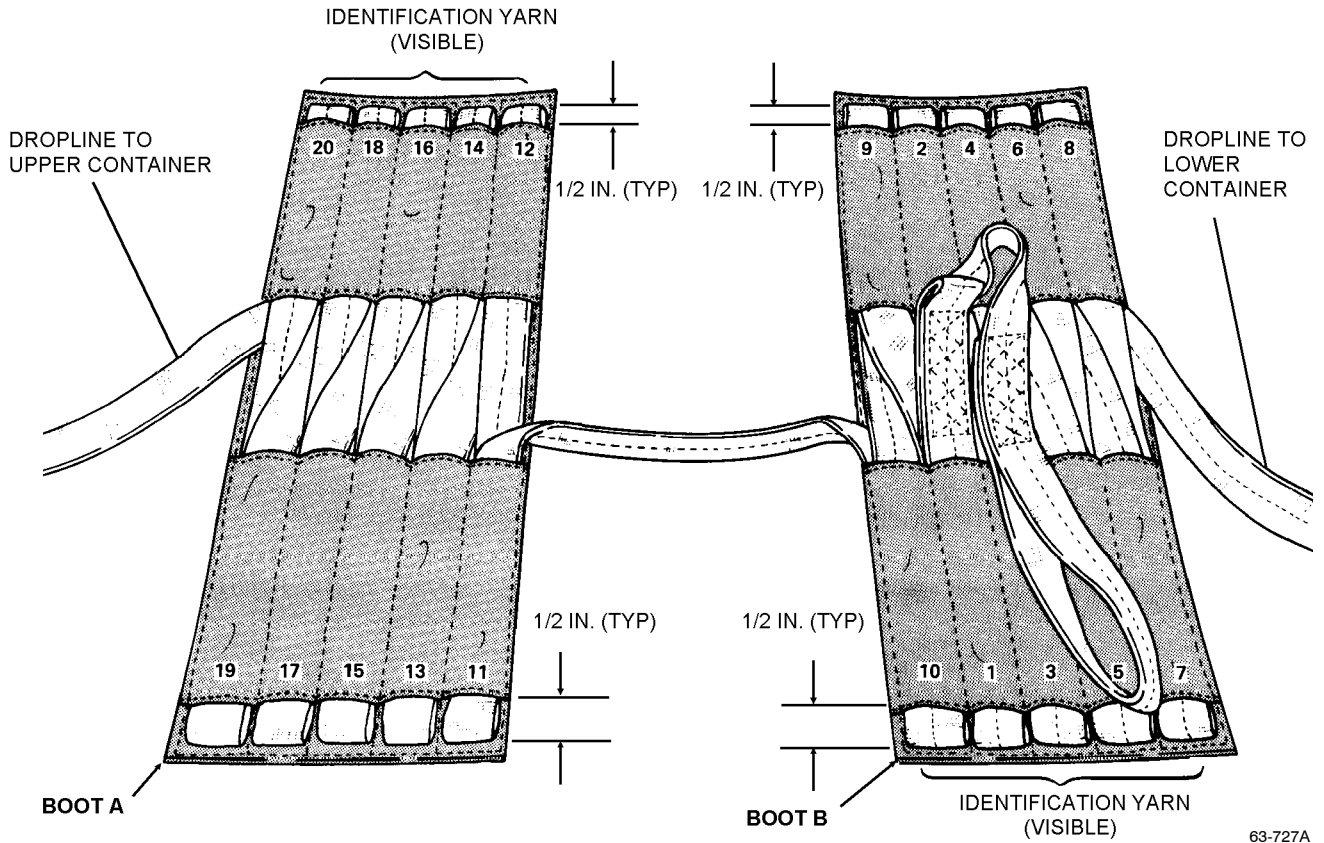


Figure 4-6. Stowage of Dropline

4-24. LIFERAFT PREPARATION, FOLDING, RIGGING AND PACKING. To prepare, fold, rig and pack the LR-1 liferaft, proceed as follows:

Materials Required

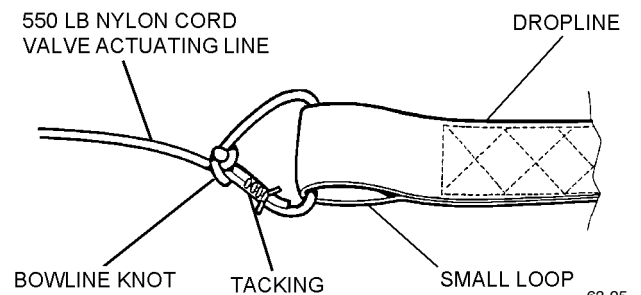
Quantity	Description	Reference Number
As Required	Cord, Nylon, 550 lb, Type III	MIL-C-5040 NIIN 00-240-2146
As Required	Thread, Nylon, Type II, Class A, Size E	V-T-295 NIIN 00-244-0609
As Required	Thread, Nylon, Type II, Class A, Size 6	V-T-295 NIIN 00-559-5211
As Required	Talc, Technical, T1	MIL-T-50036A (CAGE 81349) NIIN 00-543-7612
As Required	Rubber Band, Type I	MIL-R-1832 (CAGE 81349) NIIN 00-568-0323

NOTE

If the valve actuating line is damaged, incorrectly installed, or not installed, install new line in accordance with [steps 1](#) and [2](#).

1. Cut 15-inch length of 550-pound Type III nylon cord and sear ends.

2. Route one end through small loop on dropline and tie bowline knot. Tack with three turns of waxed nylon thread, size E, single. Tie ends with surgeon's knot followed by a square knot.



Step 2 - Para 4-24

NAVAIR 13-1-6.3-2

3. Lay liferaft assembly flat with inside facing upward and bow to right ([step A, figure 4-7](#)).

4. Ensure that all trapped air is expelled from liferaft. Ensure that oral inflation valve is locked and stowed in pocket prior to folding.

5. Lightly dust entire liferaft assembly with talc (MIL-T-50036A).

6. Fold sea anchor line in 7-inch bights; secure with rubber bands (MIL-R-1832, Type I). Fold sea anchor and stow in pocket ([step B, figure 4-7](#)).

7. Roll and secure weathershield ([step C, figure 4-7](#)).

8. Fold liferaft as follows:

WARNING

Gas under pressure. Do not loosen or attempt to remove inflation valve assembly from CO₂ cylinder.

a. Position CO₂ cylinder in liferaft stowage pocket with antichafing disc on inlet check valve.

NOTE

Maximum width of folded liferaft shall not exceed length of CO₂ cylinder.

b. Fold stern liferaft toward bow and bring end even with rear of CO₂ cylinder ([step D, figure 4-7](#)).

c. Fold liferaft over again in same direction aligning edge with top of CO₂ cylinder ([step E, figure 4-7](#)).

d. Fold bow of liferaft over toward stern. Width of this fold shall be slightly less than length of CO₂ cylinder ([step F, figure 4-7](#)).

e. Fold bow over previous folds ([step G, figure 4-7](#)).

f. Fold bow back over previous folds. Adjust folds as necessary so width of folded liferaft does not exceed length of CO₂ cylinder. Flatten liferaft by hand as much as possible ([step H, figure 4-7](#)).

9. Position folded liferaft assembly aft of lower container. Position CO₂ cylinder on top of folded liferaft for ease in making connections.

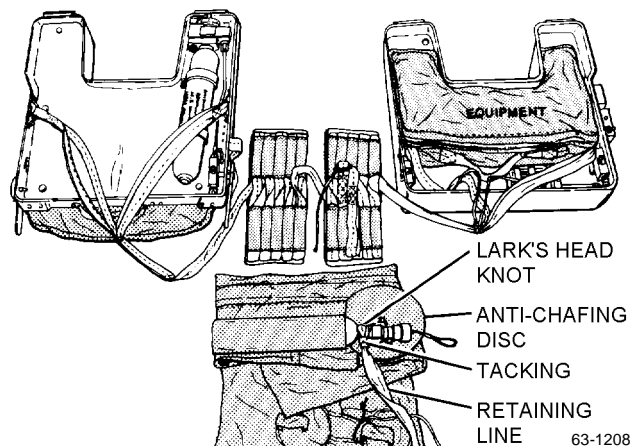
WARNING

Gas under pressure. Do not loosen or attempt to remove inflation valve assembly from CO₂ cylinder.

NOTE

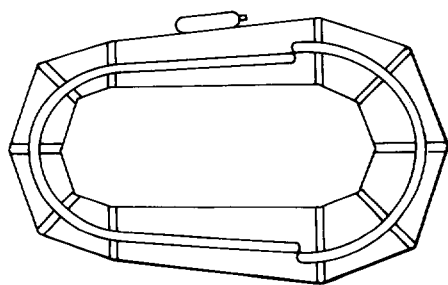
Ensure that the CO₂ cylinder is in its stowage pocket and the inflation valve is disconnected from the liferaft. Ensure that the antichafing disc is in position on the inlet check valve.

10. Attach liferaft retaining line to cylinder with a lark's head knot. Pull knot tight and tack with two turns of waxed nylon thread, size 6, single. Tie ends with surgeon's knot followed by a square knot.

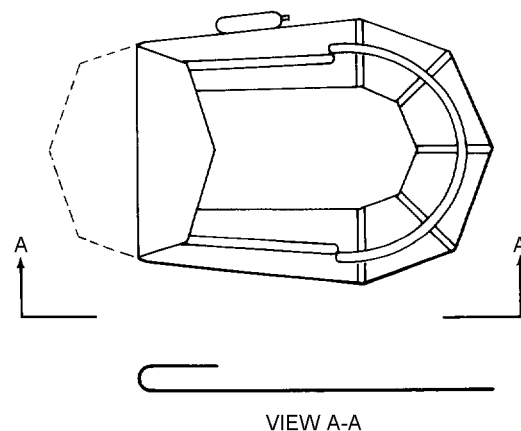


Step 10 - Para 4-24

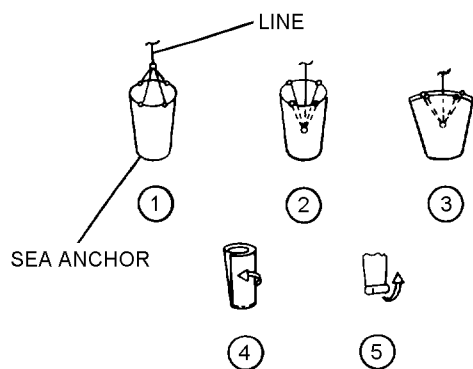
11. Accordion-fold remainder of retaining line and stow in liferaft retaining line pocket. Close pocket closure tab and secure hook and pile tape.



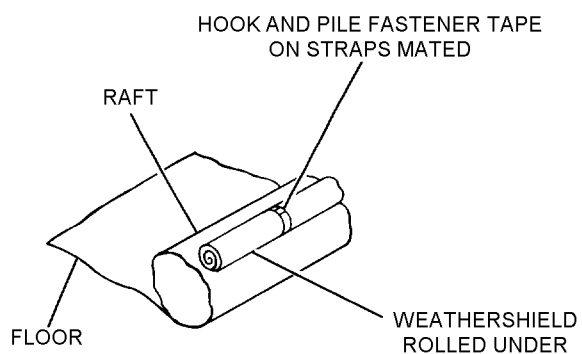
STEP A



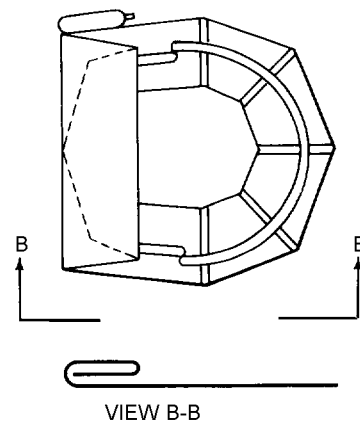
STEP D



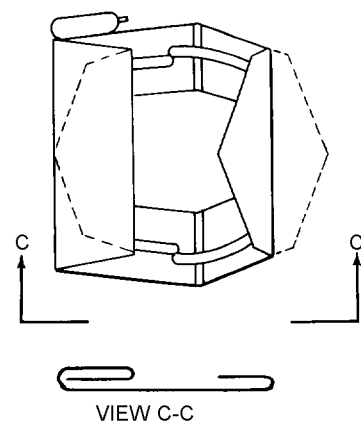
STEP B



STEP C



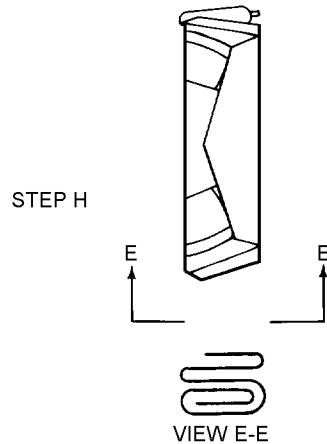
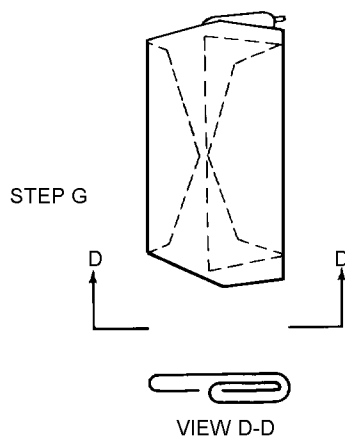
STEP E



STEP F

63-1207-1

Figure 4-7. Folding Liferaft (Sheet 1 of 2)



63-1207-2

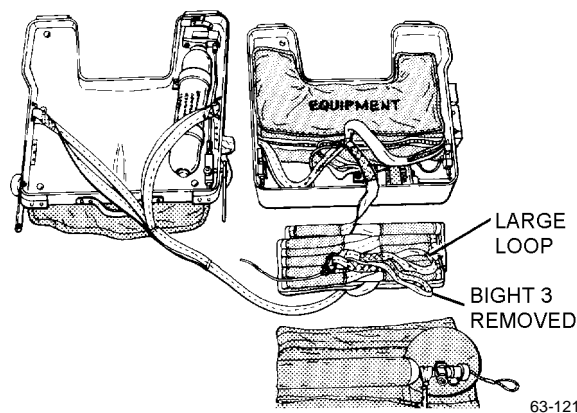
Figure 4-7. Folding Liferaft (Sheet 2 of 2)

NOTE

When repositioning boots, it may be necessary to move upper container. Make adjustments as necessary.

12. Position boot B on top of boot A and place boots between liferaft and lower container with large loop of dropline facing right.

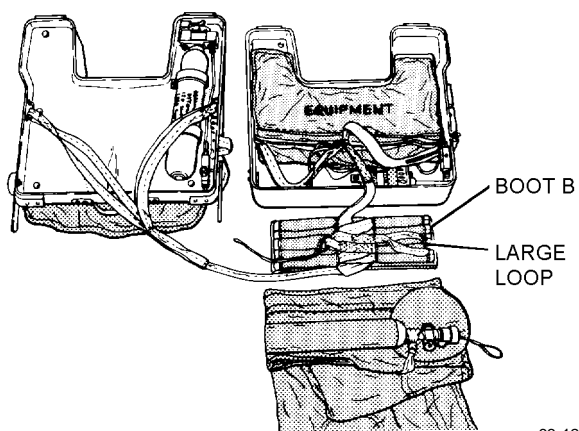
13. Remove bight from channel 3, boot B.



63-1210

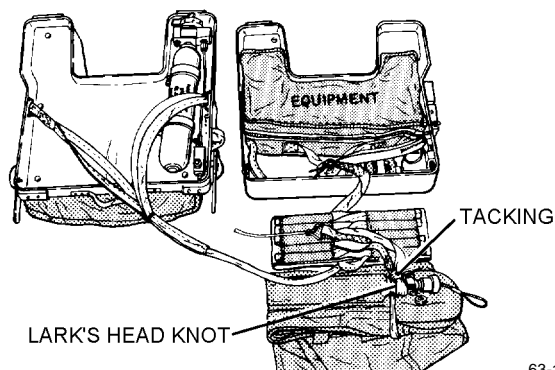
Step 13 - Para 4-24

14. Attach large loop of dropline around neck of cylinder with a lark's head knot. Pull knot tight and tack with two turns of waxed nylon thread, size 6, single. Tie ends with a surgeon's knot followed by square knot.



63-1209

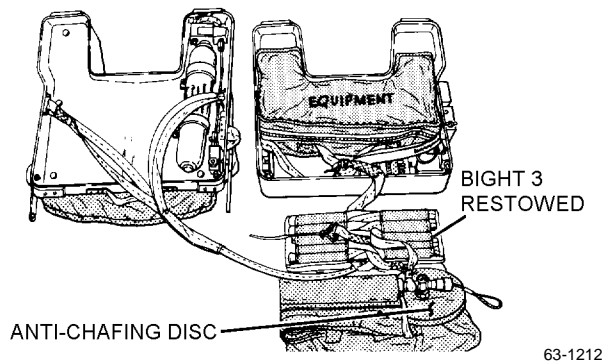
Step 12 - Para 4-24



63-1211

Step 14 - Para 4-24

15. Ensure CO₂ cylinder anti-chafing disc is installed. Attach inflation valve to liferaft inlet valve and tighten coupling nut to a torque value of 80 to 90 in-lbs. Stow bight removed from channel 3 of boot B. Bight will not extend full length of channel.



Step 15 - Para 4-24

16. Pass valve actuating line under portions of dropline assembly that are forming the lark's head knot around the neck of the cylinder.

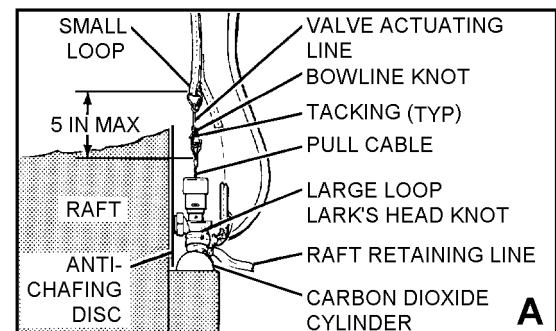
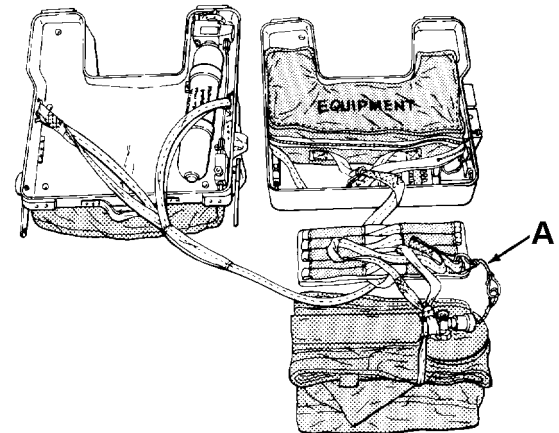
WARNING

Final dimension of valve actuating line is critical. Finished length shall not exceed 5 inches.

NOTE

It may be necessary to remove part of stowed dropline to make connection.

17. Pass valve actuating line through loop in end of pull cable and tie with a bowline knot. Tack with three turns of waxed size E nylon thread, single. Tie ends with a surgeon's knot followed by a square knot. Finished length shall not exceed 5 inches.



63-1213

Step 17 - Para 4-24

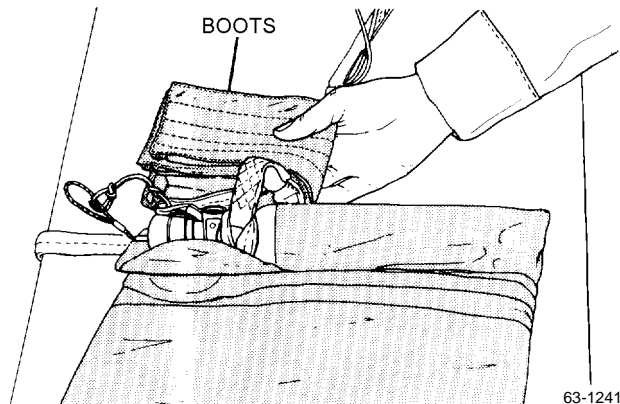
18. Pack liferaft in lower container. To pack liferaft in lower container, proceed as follows:

a. Fold boots A and B in half from right to left.

CAUTION

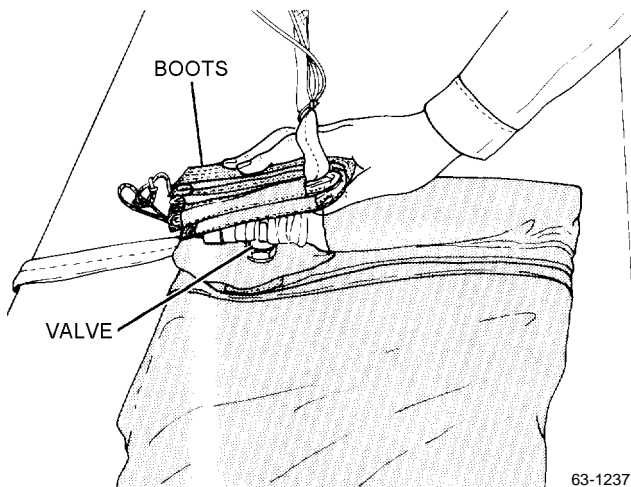
Ensure that the actuation cord is monitored during liferaft rotation to prevent inadvertent liferaft inflation.

b. Rotate liferaft in a counterclockwise direction while holding boot assemblies in set position. Re-position CO₂ cylinder on top of liferaft assembly.



Step 18b - Para 4-24

c. Flip and place boot assemblies on top of valve.

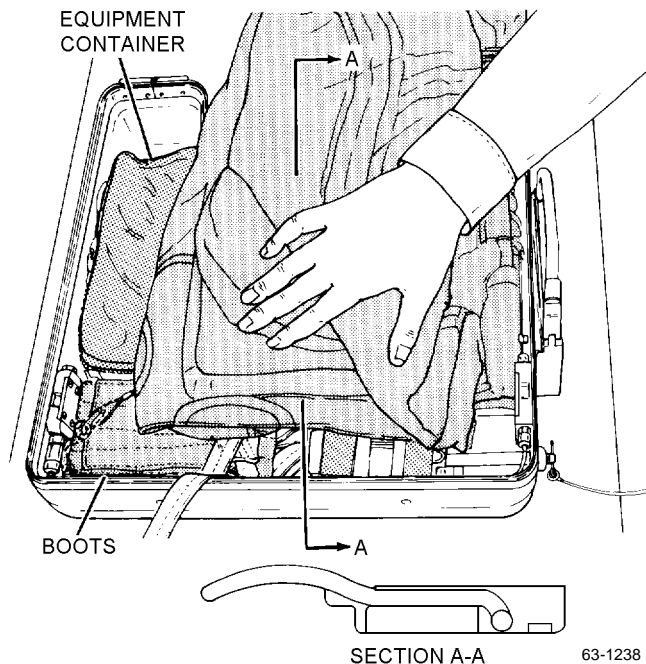


Step 18c - Para 4-24

NOTE

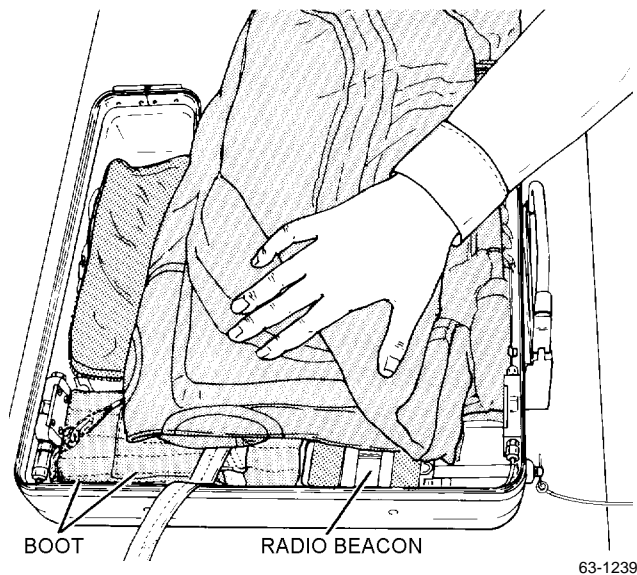
Ensure that radio beacon is clear of cords and lanyards.

d. Flip liferaft and boot assemblies over and place on lower container. Then, place folded boots in lower left corner, CO₂ cylinder in back of equipment container, and liferaft over equipment container.



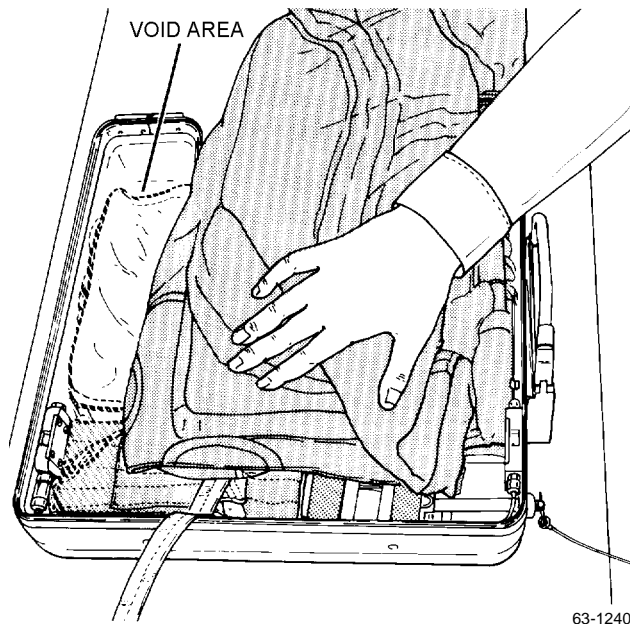
Step 18d - Para 4-24

e. Use the space between the radio beacon and the left edge of the container by spreading the boots apart.



Step 18e - Para 4-24

f. Slide CO₂ cylinder so that end of cylinder butts against right edge of container, creating a void area along left edge of lower container (this void is important in that it will accept oxygen cylinder from upper container).



63-1240

Step 18f - Para 4-24

g. Fold liferaft over and to rear of lower container (step A, figure 4-8).

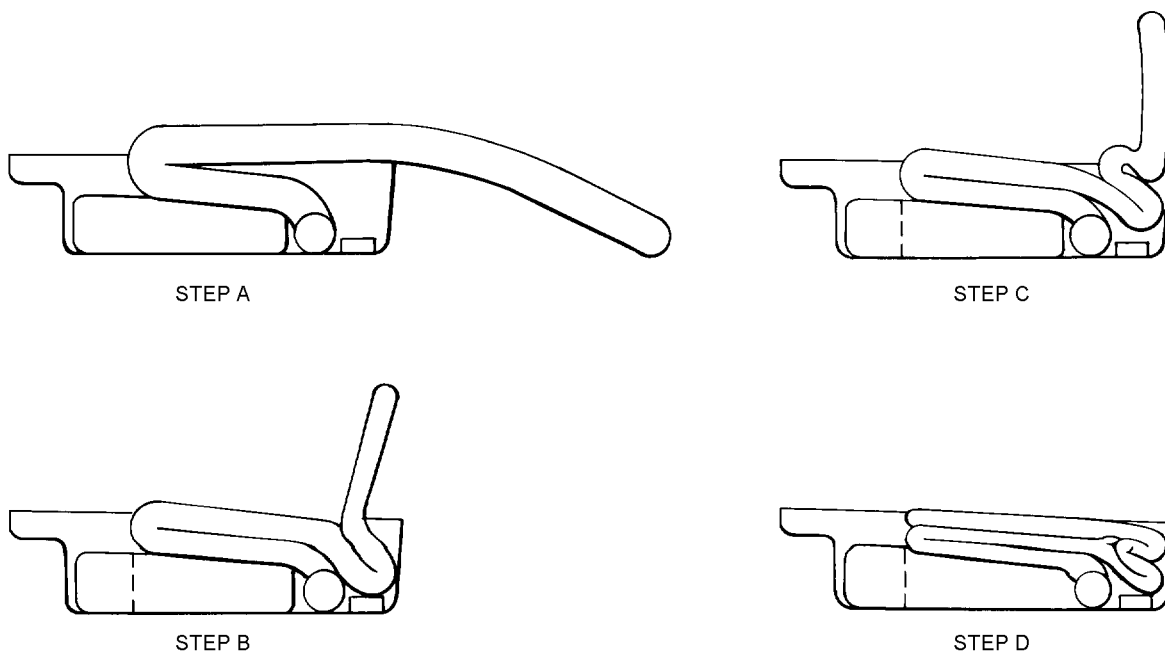
h. Fold liferaft forward and tuck fold into aft portion of lower container (step B, figure 4-8).

i. Make a 4-inch fold rearward on top of fold in step B of figure 4-8 (step C, figure 4-8).

j. Fold liferaft forward (step D, figure 4-8).

NOTE

Minimum liferaft adjustment may be required at this point to obtain flattest possible condition.

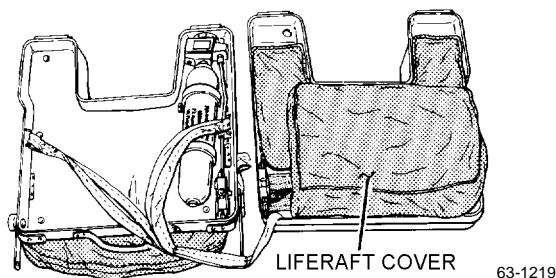


63-1216

Figure 4-8. Packing Liferaft in Lower Container

NAVAIR 13-1-6.3-2

19. Place cover over liferaft. Tuck in completely around liferaft. Ensure that liferaft material does not extend beyond cover and cover does not extend beyond edges of container.



Step 19 - Para 4-24

4-25. CLOSING CONTAINER. To close the container, proceed as follows:

NOTE

Top section of dropline may be laid on top of liferaft cover after packing.

1. Position lid on top of lower container and engage hinges on lid with hinges on lower container.

2. While closing container, lead emergency oxygen actuating lanyard through hole in left thigh portion of lower container.

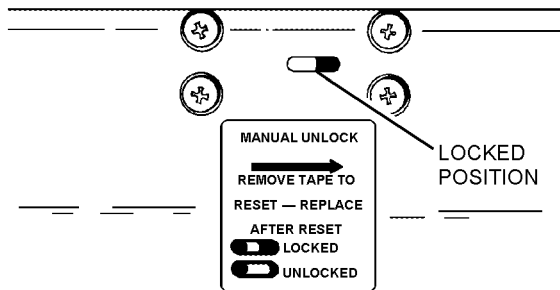
3. Insert release handle into latching mechanism.

NOTE

Ensure that latches and mating surfaces of lid and lower container are free from obstructions.

4. Press lid firmly down on lower container.

5. Verify positive latching by viewing engagement of latches through inspection ports on each side of lower container and comparing with instruction label.



63-975

Step 5 - Para 4-25

6. Examine extruded metal lip around container. All locks shall be engaged and seam undistorted. If containers are not properly secured, release handle and repeat [steps 2 through 5](#).

7. Perform release handle pull test. Refer to [paragraph 4-26](#).

8. Charge oxygen system in accordance with [paragraph 4-38](#).

9. Attach cushion to lid.

10. Ensure that 1/2-inch wide clear tape exits over lock engagement inspection ports on each side of lower container.

11. Make necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series.

4-26. Release Handle Pull Test. To perform release handle pull test, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Nylon Cord, Type I	MIL-C-5040 NIIN 00-240-2154

Support Equipment Required

Quantity	Description	Reference Number
1	Scale, Push/Pull, 0-50 Pounds	DPP-50 or DPPH-50 (CAGE 11710)

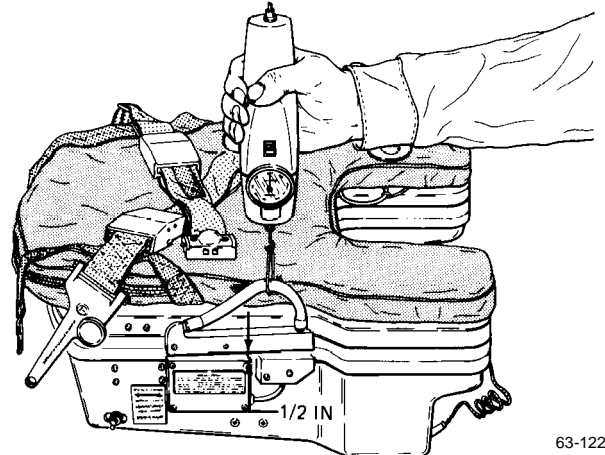
1. Attach a length of Type I nylon cord to release handle at a point approximately 4 1/2 inches forward of handle pivot point. Attach hook on DPP-50 pull scale to cord.

NOTE

Do not exert downward pressure in the latch area while performing pull test. If necessary to steady kit, place hand in center of kit. Use minimum pressure.

The length of travel of the release handle must be measured while performing the pull test.

2. Apply a steady upward pull and note force required to unlock latches. Force required to unlock latches in first 1/2-inch of travel, measured at engagement link, shall be 10 to 30 pounds, and handle shall pull free of engagement link. If failure occurs, refer to table 4-5.



63-1220

Step 2 - Para 4-26

3. Remove pull scale and cord from handle.
4. Reinstall release handle in release mechanism to reset latches. Close kit.
5. Check for proper engagement of latches through inspection ports.

Section 4-4. Turnaround/Daily/Preflight/Postflight/Transfer/Special/Conditional Inspection

4-27. GENERAL.

4-28. The Turnaround/Daily/Preflight/Postflight or Transfer Inspection consists of a visual inspection performed in conjunction with the aircraft inspection requirements for the aircraft in which the survival kit is installed. These inspections shall be performed by line personnel (plane captain) or delegated aircrew-members who have been instructed and found qualified by the Aviator's Equipment Branch.

4-29. The Conditional Inspection is an unscheduled inspection required as the result of a specific situation or set of conditions; e.g., hard-landing inspections or any inspection directed by higher authority that is not ordered in a technical directive.

4-30. The Special (7/14 day, etc.) Inspection shall be performed on inservice survival kits installed in aircraft and in ready room issue. This inspection shall be performed at the Organizational Level of maintenance by personnel assigned to the Aviator's Equipment Branch. Make necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series.

4-31. TURNAROUND/DAILY/PREFLIGHT/POST-FLIGHT/TRANSFER OR SPECIAL INSPECTION PROCEDURES. Each of subject inspections consists of a visual inspection of the following:

1. Seat kit fit in ejection seat bucket and secure attachment of lugs into seat bucket locks.

NAVAIR 13-1-6.3-2

2. Seat cushion for secure attachment, stains, torn fabric, torn stitching, proper alignment on seat, and secured fasteners.

3. Lapbelts for frayed or torn webbing, torn stitching, damaged or corroded connectors, adjusters, and seat pan attachment fittings.

4. Lapbelt release assembly for loose or missing screws and corrosion.

5. Lapbelt attachment fittings for limited rotation.

6. Oxygen hose assembly for secure attachment, deterioration, corrosion, bent electrical connector pins, and foreign matter in fittings. If repair procedure has been performed on oxygen hose assembly, check external wiring for secure attachment.

7. Oxygen gage for FULL indication.

8. Manual oxygen handle for secure seating and deterioration.

9. The AN/URT-33A radio beacon actuation lanyard for secure attachment to ejection seat bucket. Beacon actuator indicator for bent shaft and hairpin cotter for elongation, corrosion, and proper mousing.

10. Automatic emergency oxygen lanyard for secure attachment. Automatic emergency oxygen lanyard coupling assembly for spring security. Ensure that cable coupling has not separated from rest of cable.

11. Remove cushion and toggle access plug to inspect toggle and cable balls with flashlight.

a. Toggle shall be in vertical (cocked) position relative to reducer assembly.

b. Inspect cables and cable balls for correct routing and engagement with toggle.

c. Replace toggle access plug and cushion.

12. Leg restraint retaining straps for secure fasteners and free movement of leg restraint straps.

4-32. If discrepancies are found or suspected, Maintenance Control shall be notified.

4-33. Survival kits which do not pass inspection and cannot be repaired in the aircraft shall be removed in accordance with applicable aircraft manual and replaced with a Ready For Issue (RFI) survival kit. Non-RFI survival kits shall be forwarded to the nearest maintenance activity having repair capability for corrective action.

Section 4-5. Acceptance/Phased/SDLM/PDM Inspection

4-34. GENERAL.

4-35. An Acceptance Inspection shall be performed on a survival kit when it is placed into service or at the time a reporting custodian accepts a newly assigned aircraft from any source, and on return of an aircraft from SDLM/PDM or other major D-level rework. The Phased/SDLM/PDM Inspection cycle of the survival kit shall be 448 days. In no case, however, shall the phased interval exceed 448 days. The battery test inspection cycle for the AN/URT-33A Radio Beacon is dependent upon the type of the battery installed. Refer to NAVAIR 16-30URT33-1 for battery test inspection cycles and requirements. For acceptance inspection purposes, verification of pyrotechnics and configuration is accomplished by visual record examination only. Disassembly beyond the daily inspection requirements of applicable

publications is not required. Activities may elect to increase the depth of inspection if equipment condition, visual external inspection, or record examination indicates such action is warranted.

4-36. VISUAL INSPECTION. This inspection shall be performed prior to the functional check of the kit. Visually inspect the following:

1. Cushion for rips, tears, loose or frayed stitching, and general condition.

2. Container surface unclean, rough, misaligned, cracks, nicks, embedded foreign matter, distortion of mating surfaces, and burrs or sharp edges inside or outside survival kit.

3. Condition and security of hook and pile tape.

4. Release handle for wear, corrosion, and damage.
5. Harness assembly for cuts, loose or frayed stitching and webbing and security of attachment.
6. Lapbelt release assembly for loose or missing screws and corrosion.
7. Oxygen and communication hose assembly for cracks and deterioration, bent electrical connector pins, and foreign matter in fittings.
8. Any component loose or otherwise not securely retained.
9. Any functioning part that operates with difficulty.

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10. Emergency oxygen system for contamination, corrosion, damaged oxygen gage, rounded edges on pressure reducer lever, crimped cable housing, and security of swaged balls at ends of both release cables.

11. Evidence of oil preservatives or hydrocarbon material on emergency oxygen system components or hoses.

12. Markings and labels that are missing, insufficient, incorrect, illegible, loose, or not permanent.

13. Cable assemblies for rust, corrosion, fraying and binding.

14. Negative g-strap bracket for secure attachment.

15. Lubricant on upper container lid lock hook surfaces.

4-37. FUNCTIONAL CHECK. The functional check shall be performed any time a kit is placed in service, after any adjustment procedures, or when equipment condition, visual external inspection, or record examination indicates such action is warranted to determine the condition of the kit. To perform a functional check, proceed as follows:

Materials Required

Quantity	Description	Reference Number
1	Leak Detection Compound, Type I	MIL-L-25567
As Required	Lint-free Cloth, Type II	MIL-C-85043

Support Equipment Required

Quantity	Description	Reference Number
1	Test Stand	59A120 (CAGE 02551) or 31TB1995-1 (CAGE 99251)
1	Scale, Push/Pull 0-50 Pounds	DPPH-50 (CAGE 11710)
1	Toggle Reset Tool	Fabricate IAW paragraph 4-69

WARNING

Before use, inspect leak detection compound. Compound which is not clear and free from suspended material/sediment is considered contaminated and shall be disposed of. Compound exhibiting peculiar odors, such as acetone or alcohol, is considered contaminated and shall be disposed of.

CAUTION

Discontinue functional test if seat kit fails to pass any steps of test procedures. Repair malfunction before continuing procedures or damage to the seat kit may result. After repair, the entire test procedure shall be performed.

NOTE

Performance of test stand is dependent upon skill of operator. It is imperative that operator be thoroughly familiar with instruments, controls, and connections that comprise systems incorporated in test stand; See NAVAIR 17-15BC-20 and NAVAIR 13-1-6.4-4 to familiarize yourself with 59A120 or 31TB1995 series liquid oxygen converter test stands.

Emergency oxygen cylinder pressures used in this functional test were derived under ideal shop conditions of 70°F (21°C). Variances in ambient air temperatures directly affect charging pressures. Refer to table 4-4 for details.

Ensure that emergency oxygen cylinders are filled to 1800 to 2000 psi.

1. Remove bell jar and connect oxygen outlet hose of kit to fitting (C-1) and ensure that valve (V-2) is open and all other test stand valves are closed (figure 4-9).

2. Attach pull scale to manual emergency oxygen release handle.

3. Measure force required to disengage manual oxygen release. Force required shall be 10 to 30 pounds

NAVAIR 13-1-6.3-2

and emergency oxygen system shall actuate and indicate 45 to 80 psi on test stand gage (PG-1).

4. Reset reducer assembly.

5. Turn oxygen supply cylinder to test stand on.

6. Slowly open valve (V-6) on test stand and adjust pressure on gage (PG-1) to 90 psi.

7. Measure force required to disengage manual oxygen release with a scale. Force required shall be 10 to 30 pounds.

NOTE

Any degree of leakage in the oxygen system requires corrective maintenance.

8. Use leak detection compound to check all pressure lines and fittings on survival kit to ensure no leakage.

9. Reset reducer assembly.



Do not increase pressure above 150 psi.

NOTE

Unseating can be determined by listening and observing gage (PG-1) on test stand.

10. Using valve (V-6), increase pressure until relief valve unseats.

NOTE

Pressure may be reduced below opening (unseating) pressure of the relief valve by closing valve (V-6) and opening valve (V-5).

11. Repeat [step 10](#) several times to establish a correct pressure. Relief valve shall unseat at 120 to 140 psi when pressure is increased, and reseat at 110 psi minimum when pressure is decreased. Once re-

seated, relief valve shall be leak tight (no indication on PG-1 of pressure drop).

12. Use leak detection compound to check relief valve to ensure no leakage.

13. Close valve (V-6) and bleed oxygen pressure from system by opening valve (V-5). All pressure is bled when gages (PG-1 and PG-4) indicate 0 psi.

14. Close valve (V-5).

15. Be sure valve (V-2) is opened and all other test stand valves are closed.

16. Measure force required to disengage automatic oxygen release with a scale. Force required shall be 10 to 30 pounds and emergency oxygen shall actuate and indicate 45 to 80 psi on gage (PG-1) on test stand.

17. Connect automatic oxygen release lanyard and reset reducer assembly.

18. Open valve (V-5), and ensure that all other test stand valves are closed.

19. Actuate toggle on reducer to ensure positive flow through valve (V-5). Reset reducer assembly.

20. Open valve (V-8).

21. Slowly close valve (V-5), while observing gage (DF-1).

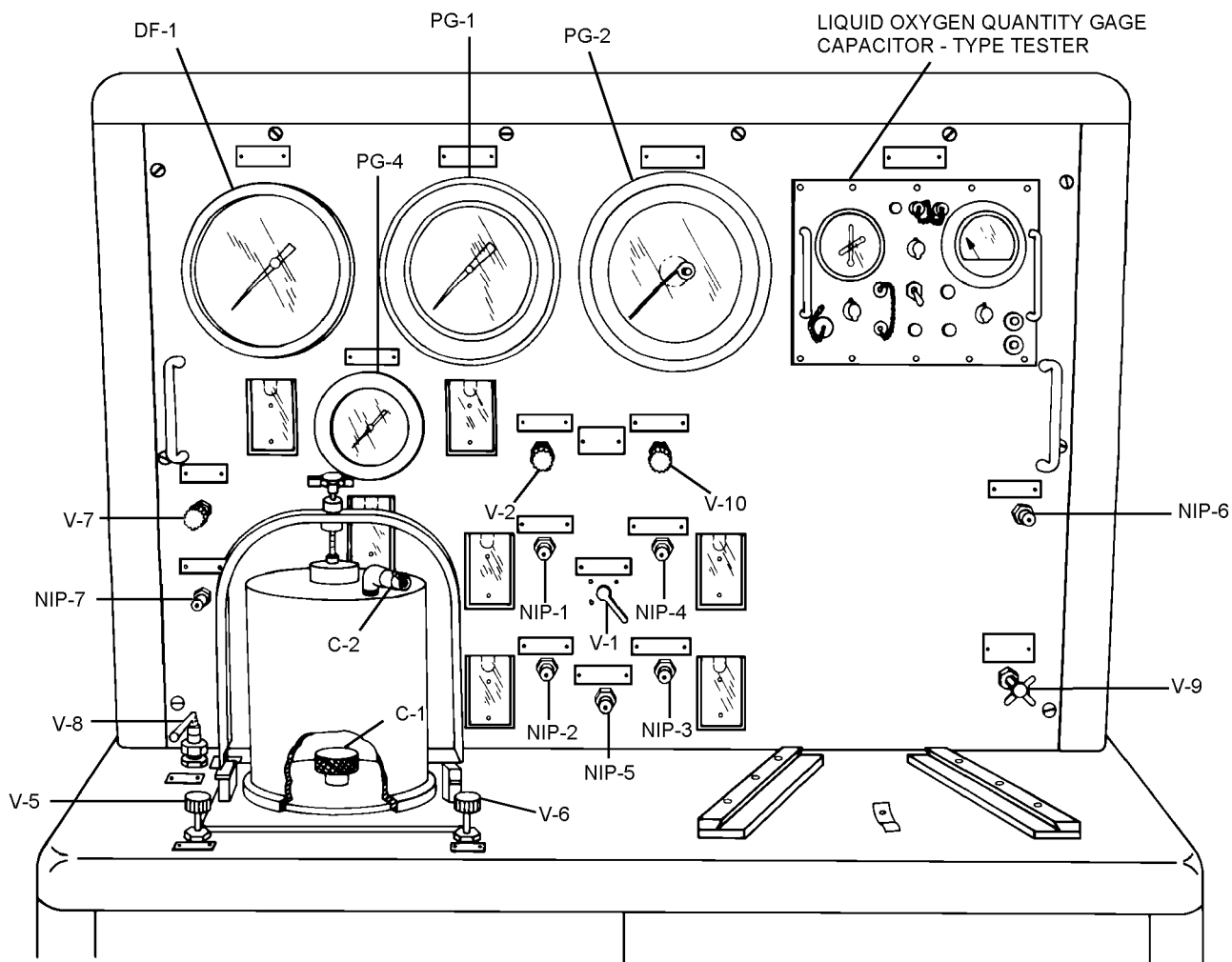
NOTE

Observe gage (DF-1) for two minutes to ensure no leakage. Any pressure rise indicates leakage in the reducer valve seat and requires correct maintenance.

22. Close valve (V-8), open valve (V-5), and disconnect oxygen outlet hose from fitting (C-1).

23. Ensure that all valves on test stand are secured.

24. Connect oxygen outlet hose to fitting (NIP-6). Ensure that valve (V-10) is open and all other test stand valves are closed.



C-1	BELL JAR BOTTOM COUPLING	PG-2	FLOWMETER INDICATOR GAGE
C-2	BELL JAR TOP COUPLING	PG-4	0 – 15 PSIG LOW PRESSURE TEST GAGE
DF-1	0 – 100" H ₂ O DIFFERENTIAL PRESSURE GAGE	V-1	FLOWMETER SELECTOR GAGE
NIP-1	0 – 0.25 LPM FLOWMETER CONNECTION	V-2	TEST PRESSURE GAGE TO BELL JAR VALVE
NIP-2	0 – 1 LPM FLOWMETER CONNECTION	V-5	SYSTEM BLEED VALVE
NIP-3	0 – 50 LPM FLOWMETER CONNECTION	V-6	OXYGEN SUPPLY VALVE
NIP-4	0 – 150 LPM FLOWMETER CONNECTION	V-7	DIFFERENTIAL PRESSURE BLEED VALVE
NIP-5	CONVERTER SUPPLY OUTLET CONNECTION	V-8	DIFFERENTIAL PRESSURE SHUT-OFF VALVE
NIP-6	SUPPLY TO CONVERTER CONNECTION	V-9	CONVERTER SUPPLY FLOW CONTROL VALVE
NIP-7	DIFFERENTIAL PRESSURE GAGE CONNECTION	V-10	TEST PRESSURE GAGE BUILD-UP AND FLOW VALVE
PG-1	0 – 160 PSIG TEST PRESSURE GAGE		

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Figure 4-9. Test Stand Model 59A120

25. Connect test stand hose to fitting (NIP-5) and fitting (NIP-4).

26. Turn valve (V-1) to the NIP-4 position.

27. Be sure that 1800 to 2000 psi is in the oxygen cylinder of the kit.

28. Pull manual oxygen release. Oxygen pressure on gage (PG-1) shall indicate 45 to 80 psi.

29. Slowly open valve (V-9) to indicate 90 LPM on gage (PG-2). Oxygen pressure shall indicate 45 to 80 psi on gage (PG-1).

NOTE

When needle of cylinder pressure gage is between the E and F of REFILL, pressure is approximately 250 psi.

30. Observe emergency oxygen cylinder pressure gage and allow the system to decrease to 250 psi while maintaining 90 LPM and 45 to 80 psi.

31. Close valve (V-9).

32. With zero flow indicated on gage (PG-2), pressure indicated on gage (PG-1) shall be 45 to 80 psi.

33. Reset reducer assembly.

34. Bleed oxygen pressure from system by opening valves (V-5 and V-2). All pressure is bled when gages (PG-1 and PG-4) indicate 0 psi.

35. Disconnect kit from test stand.

36. Secure test stand.

37. All areas where leak detection compound was applied shall be wiped thoroughly clean. Dry with lint-free cloth, filtered low pressure compressed air, or low pressure nitrogen.

38. Recharge emergency oxygen cylinder to 1800 to 2000 psi. Refer to [paragraph 4-38](#) for charging procedures.

4-38. PURGING AND CHARGING EMERGENCY OXYGEN SYSTEM. To purge and charge the emergency oxygen cylinder, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Leak Detection Compound, Type I	MIL-L-25567
As Required	Nitrogen, Type I, Class I, Grade B	BB-N-411
As Required	Aviators Breathing Oxygen, Type I	MIL-O-27210
As Required	Lint-free Cloth, Type II	MIL-C-85043

Support Equipment Required

Quantity	Description	Reference Number
1	Oxygen Purging Electric Heater or equivalent	C5378 (CAGE 96787)
1	Shut-off Valve	—
1	Pressure Regulator	MIL-R-9198A
1	Adapter, Filling (Optional)	21000T130-1 (CAGE 53655)
1	Toggle Reset Tool	Fabricate IAW paragraph 4-69



Servicing of emergency oxygen system is accomplished only after removal of survival kit from aircraft.

Before use, inspect leak detection compound. Compound which is not clear and free from suspended material/sediment is considered contaminated and shall be disposed of. Compound exhibiting peculiar odors, such as acetone or alcohol, is considered contaminated and shall be disposed of.

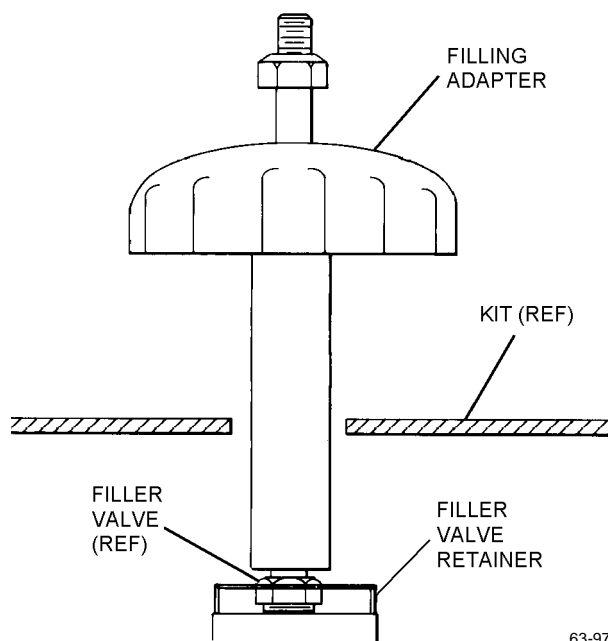
- 1. Remove survival kit in accordance with applicable maintenance manual.

WARNING

If necessary to release pressure in oxygen bottle before purging/filling, pull emergency oxygen lanyard. This releases pressure through reducer/manifold. DO NOT release pressure through filler valve or adapter. Releasing high-pressure oxygen through restriction of filler valve causes heat. Fire or explosion may result.

NOTE

Use of filling adapter on SKU-3/A survival kit is optional.



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Figure 4-10. Filling Adapter

2. Remove cushion assembly from survival kit assembly.

3. Remove oxygen filler valve cap and connect filling adapter to filler valve (figure 4-10).

NOTE

If the emergency oxygen system is contaminated or the cylinder has remained empty for more than 2 hours, purging is required. If an emergency oxygen cylinder does not warrant the purging process, proceed to step 11 for charging sequence.

4. Deplete emergency oxygen cylinder if necessary.

5. Connect nitrogen source to filling adapter/filler valve, and close pressure reducer.

NOTE

If relief valve on oxygen purging electric heater will not allow 100 psi, raise pressure only to allowable limit.

6. Slowly pressurize to 100 psi with nitrogen at temperature of 110° to 130°C (230° to 266°F), using electric heater.

7. Turn off nitrogen source and deplete oxygen cylinder.

8. Repeat steps 6 and 7 twice.

9. With pressure reducer open, turn on nitrogen source and purge for 10 minutes at temperature of 110° to 130°C (230° to 266°F).

10. Turn off nitrogen source and disconnect.

11. Connect oxygen source to filling adapter with suitable pressure regulator and shutoff valve. Reset pressure reducer.

12. Slowly pressurize to 100 psi.

13. Deplete cylinder to 50 psi.

WARNING

Observe filling stages as rapid application of oxygen pressure creates heat which may result in fire or explosion.

Allow no less than 3 minutes for each filling stage and 2-minute intervals for cooling between stages.

NOTE

If kit is to be stored, the emergency oxygen bottle shall be depleted or filled to 200 PSI (when needle on gage bisects the E on REFILL). For shipping, fill or deplete to 25 PSI using the gage on the oxygen refill cylinder.

14. Charge emergency oxygen system in stages in accordance with [table 4-3](#) until pressure gage indicates correct pressure for existing ambient temperature. See [table 4-4](#).

15. Secure shut-off valve from oxygen source.

16. Loosen oxygen filler adapter (if installed) until all pressure is bled from high-pressure line. Remove filling adapter.

17. Apply leak detection compound around oxygen gage and reducer. Check for leaks, then wipe connections clean using a lint-free cloth.

Table 4-3. Charging Stages

Stage	PSI
1	500
2	1000
3	1500
4	1800
5	2000

Table 4-4. Ambient Air Temperature Vs Charging Pressures

Ambient Air Temperature		Charging Pressure
°F	°C	PSI
0	-18	1550-1750
10	-12	1600-1775
20	-7	1625-1800
30	-1	1675-1850
40	5	1700-1875
50	10	1725-1925
60	16	1775-1975
70	21	1800-2000
80	27	1825-2050
90	32	1875-2075
100	38	1900-2125
110	43	1925-2150
120	49	1975-2200
130	54	2000-2225

18. Reinstall oxygen filler valve cap on filler valve. Filler valve cap should be hand tightened only.

19. Reinstall cushion assembly on survival kit.

20. Reinstall survival kit using applicable maintenance manual.

Section 4-6. Maintenance

4-39. GENERAL.

WARNING

Keep working area clean and free of oil, grease and dirt. Do not attempt to perform any component removal with the oxygen system pressurized.

4-40. This section contains procedures for troubleshooting, disassembly, cleaning, inspection of disassembled parts, repair or replacement of parts, assembly, and adjustment. Disassemble only to extent required to perform task. Work shall be performed in a clean, dust- and grease-free area.

4-41. TROUBLESHOOTING.

4-42. When troubles or operating malfunctions are encountered, locate probable cause and remedy using [table 4-5](#).

Table 4-5. Troubleshooting

Trouble	Probable Cause	Remedy
Low or zero indication on pressure gage.	System empty.	Charge system in accordance with paragraph 4-38 .
	Defective gage.	Replace gage.
	Leaking components.	Tighten connections or replace.
	Leaking oxygen/communication hose assembly.	Perform leak test in accordance with NAVAIR 13-1-6.3-1.
Relief valve leakage.	Defective relief valve.	Disassemble, remove and replace relief valve and packing.
Relief valve does not operate within tolerance of 120 to 140 psi when simulated aircraft back pressure is applied during test.	Defective or out of adjustment relief valve.	Adjust to meet required specifications. If specifications cannot be met, replace relief valve.
Pull force to actuate emergency oxygen system is not within tolerance of 10 to 30 pounds.	Cable broken.	Replace cable.
	Crushed cable/conduit assemblies.	Replaced cable/conduit assembly.
Emergency oxygen does not actuate when manual release is pulled.	Crushed cable/conduit assembly.	Replace cable/conduit assembly.
	Reducer toggle forced beyond vertical (cocked) position, canted or turned.	Reposition toggle.
	Cable balls may be wrapped around reducer toggle and jammed against inside of kit lid.	Inspect manual cable assembly and reposition.
		Inspect and adjust the automatic emergency oxygen release in accordance with paragraph 4-66 .

Table 4-5. Troubleshooting (Cont)

Trouble	Probable Cause	Remedy
Emergency oxygen does not actuate when automatic release is pulled.	Cable balls may be wrapped around reducer toggle and jammed against inside of kit lid.	Inspect and adjust the automatic emergency oxygen release in accordance with paragraph 4-66 .
	Automatic actuation cable out of adjustment.	Reposition toggle and adjust the automatic emergency oxygen release in accordance with paragraph 4-66 .
	Reducer toggle forced beyond vertical (cocked) position, canted, or turned.	
Emergency lanyard coupling assembly loose.	Broken or missing spring.	Replace spring.
Loss of aircraft communications.	Broken or misaligned pins and sockets in hose connectors. Open or short circuit in oxygen hose wiring.	Perform electrical check in accordance with NAVAIR 13-1-6.3-1.
Kit lid locks fail to release simultaneously.	Lid locks out of adjustment.	Adjust locks in accordance with paragraph 4-65 .
Pull force to actuate kit release mechanism is not within tolerance of 10 to 30 pounds.	Obstructions between upper and lower container mating surfaces.	Remove obstruction.
	Improper folding of liferaft assembly.	Refold liferaft assembly.
No oxygen output pressure with pressure reducer actuated.	Weak or broken spring (27, figure 4-23) in pressure reducer.	Bleed system; disassemble in accordance with paragraph 4-43 and replace spring.
	Pressure reducer out of adjustment.	Adjust pressure reducer in accordance with paragraph 4-64 .
	Defective oxygen gage.	Bleed system; replace oxygen gage.
	Foreign matter in output flow path.	Bleed system; disassemble in accordance with paragraph 4-43 and clean.
	Poppet (17, figure 4-23) does not extend into position.	Bleed system; disassemble in accordance with paragraph 4-43 and replace poppet and seat.
Oxygen system output pressure not within 45 to 80 psig limits.	Pressure reducer out of adjustment	Adjust pressure reducer in accordance with paragraph 4-64 .
	Weak or broken poppet spring (16, figure 4-23) in pressure reducer.	Bleed system; disassemble in accordance with paragraph 4-43 and replace poppet spring.
	Defective pressure reducer.	Replace reducer.
Pulsating pressure at outlet port.	Bent plunger (28, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace plunger.

Table 4-5. Troubleshooting (Cont)

Trouble	Probable Cause	Remedy
Oxygen system leaking; low pressure side of reducer.	Defective O-ring (31, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace O-ring.
	Weak or broken spring (16, figure 4-23) in pressure reducer.	Bleed system; disassemble in accordance with paragraph 4-43 and replace poppet spring.
Pressure reducer will not shut off.	Bent poppet (17, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace poppet.
	Broken poppet spring (16, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace poppet spring.
	Dirt.	Bleed system; disassemble in accordance with paragraph 4-43 and clean.
	Misaligned seat. (20, figure 4-23)	Bleed system; disassemble in accordance with paragraph 4-43 and replace seat.
	Defective retaining ring (13, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace retaining ring.
Pressure reducer does not meet required flows.	Pressure reducer out of adjustment.	Adjust pressure reducer in accordance with paragraph 4-64 .
	Weak or broken poppet spring (16, figure 4-23) in pressure reducer.	Bleed system; disassemble in accordance with paragraph 4-43 and replace spring.
	Improper assembly of pressure reducer.	Bleed system; disassemble in accordance with paragraph 4-43 and clean.
	Dirty filter assembly (14, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace filter assembly.
Oxygen system leaking; high pressure side of reducer.	Misaligned seat (20, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace seat.
	Bent poppet (17, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace poppet.
	Broken poppet spring (16, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace poppet spring.
	Inverted backup ring (19, figure 4-23).	Bleed system; disassemble in accordance with paragraph 4-43 and replace backup ring.

4-43. DISASSEMBLY.

4-44. Disassemble survival kit to the extent necessary to replace defective components.



Keep working area clean and free of oil, grease, dirt, and dust which may cause fire or explosion when in contact with oxygen.

Do not disassemble any part of emergency oxygen system while system is pressurized.

- 1. Pull emergency oxygen release lanyard or green ring to release pressure in emergency oxygen system.

NOTE

Discard all packings, seals, cotter pins, and Teflon sealing tape removed during disassembly of emergency oxygen system.

Discard all threaded inserts, rivets, rubber pads, seals, molding, or hook and pile tape removed during assembly of the survival kit.

- 2. Disassemble survival kit using index numbers assigned to [figure 4-19 through 4-27](#) as a disassembly sequence. Refer to [paragraph 4-45](#) for disassembly of pressure reducer assembly.

4-45. DISASSEMBLY OF PRESSURE REDUCER ASSEMBLY. The four major areas of disassembly in the pressure reducer assembly ([figure 4-11](#)) are (1) removal of oxygen gage, filler valve, plug, and adapter; (2) removal and disassembly of adjustment assembly; (3) disassembly of high pressure assembly; and (4) disassembly of low pressure assembly. Determine area of malfunction using [table 4-5, Troubleshooting](#), and disassemble only to the extent necessary for corrective maintenance.

Support Equipment Required

Quantity	Description	Reference Number
1	Vise	—
1	Pressure Reducer Tool Set (figure 4-12)	T216D900-1 (CAGE 30941) NIIN 01-100-8928
1	Retaining Ring Pliers	S0100 (CAGE 79136)
1	Retaining Ring Pliers	SL0100 (CAGE 79136)
1	Toggle Reset Tool	Fabricate IAW paragraph 4-69
1	Hex Key, 5/32-Inch	—



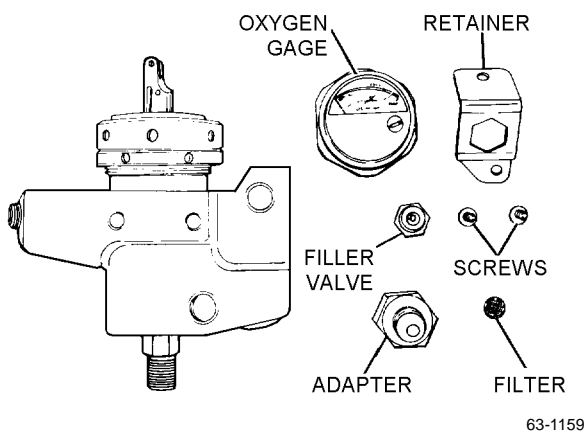
Do not use oil or any material containing oil in conjunction with oxygen equipment. Oil, even in a minute quantity, coming in contact with oxygen can cause explosion or fire. Dust, lint, and fine metal particles are also dangerous.

NOTE

Maintenance personnel are advised to read and thoroughly understand the procedures of each step prior to attempting any maintenance action.

- 1. Remove oxygen gage, filler valve and adapter as follows:
 - a. Remove oxygen gage.
 - b. Remove adapter and discard O-ring.
 - c. Remove two attaching screws and remove filler valve retainer.
 - d. Remove filler valve assembly.

e. Remove filter assembly.



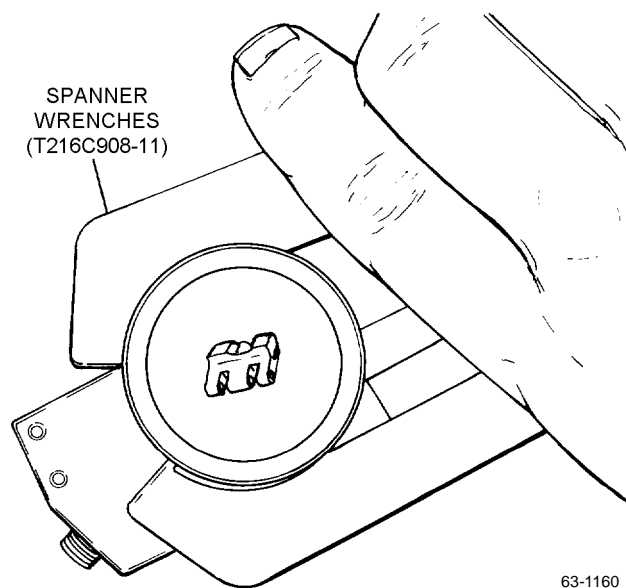
Step 1e - Para 4-45

f. Remove plug, using a 5/32-inch hex key.

g. Replace worn or defective parts as necessary.

2. Remove and disassemble adjustment assembly as follows:

a. Position oxygen pressure reducer assembly with cap adjustment side up. Loosen lock ring using spanner wrench (T216C908-11) in a clockwise rotation while holding the adjusting cap with the second spanner wrench.

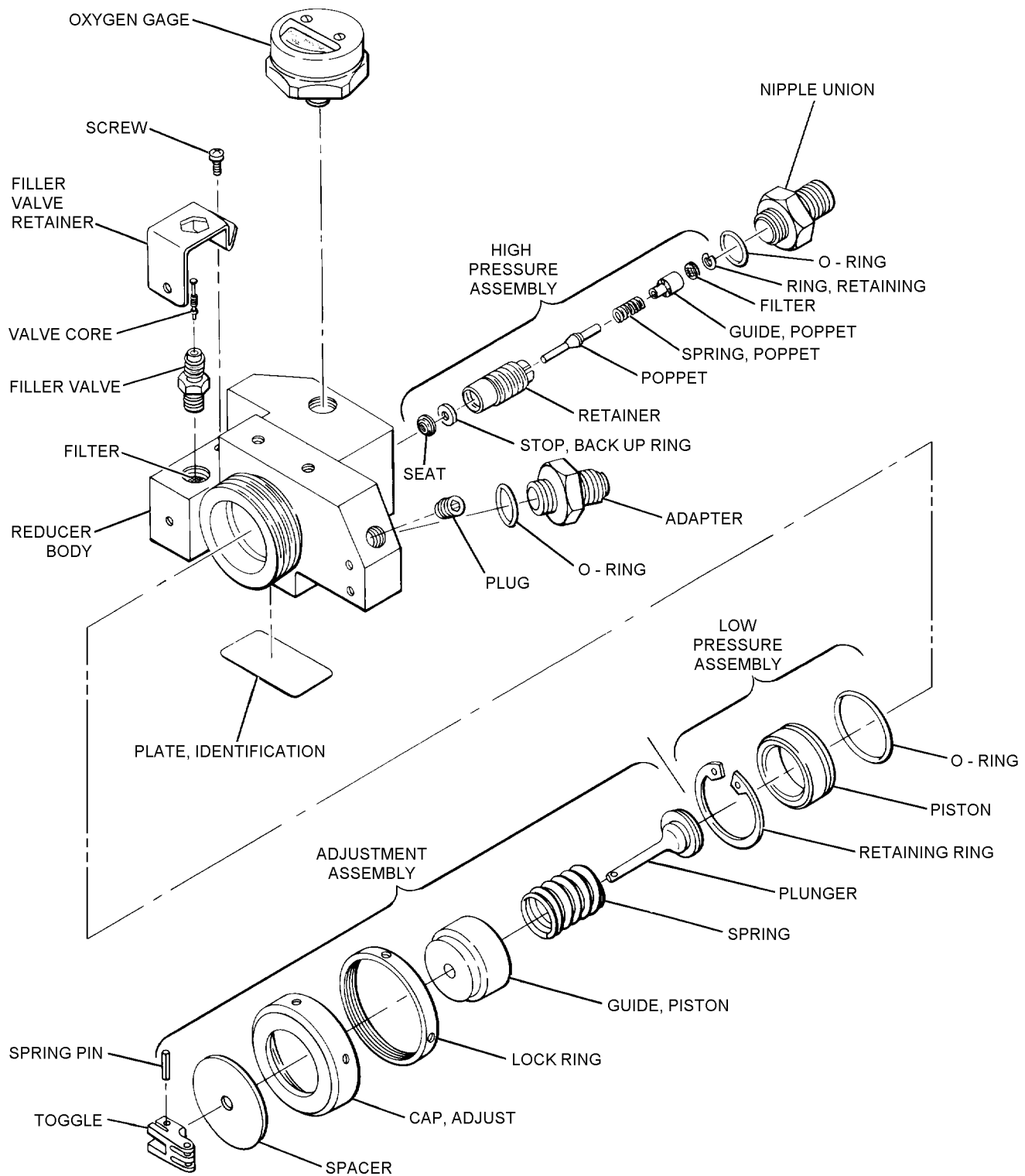


Step 2a - Para 4-45

NOTE

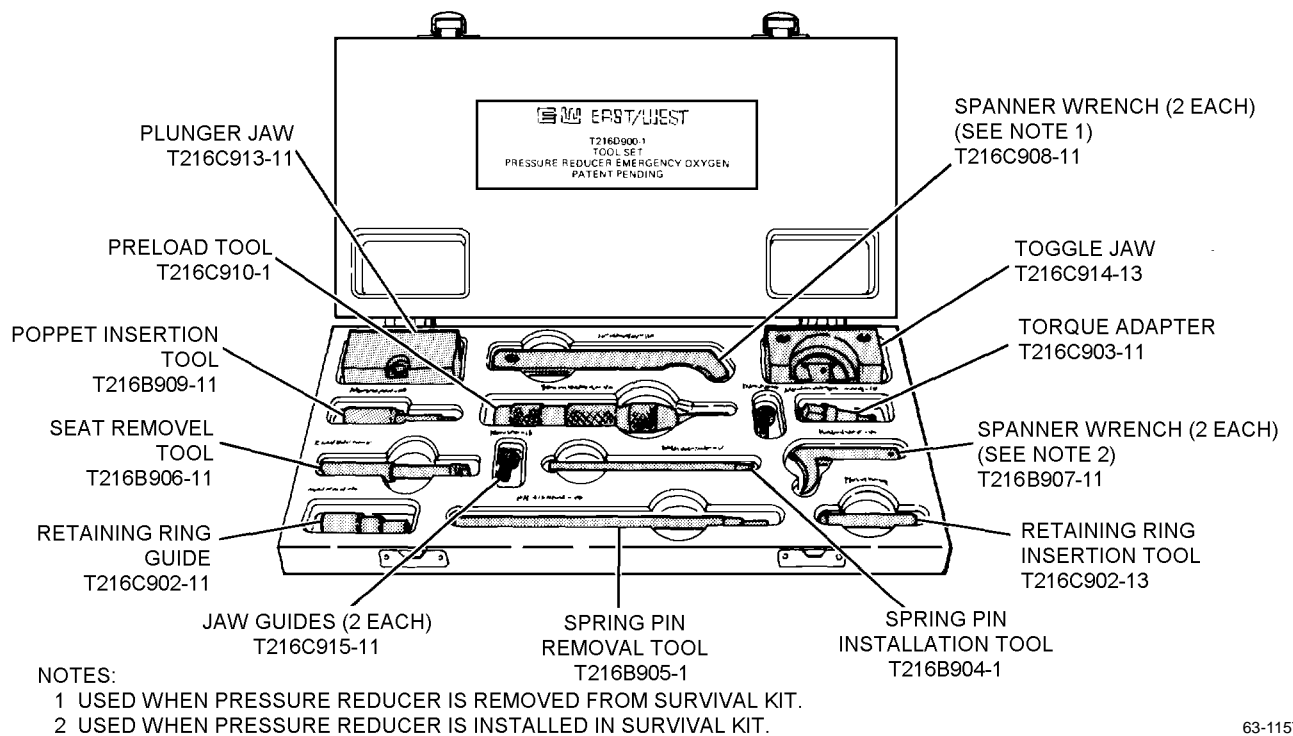
To permit hand removal of the adjustment assembly ensure that toggle is in upright (OFF) position. To obtain desired position, insert toggle reset tool in slot on either side of toggle and twist.

b. Remove adjustment assembly from pressure reducer by rotating in a counterclockwise direction.



63-1158

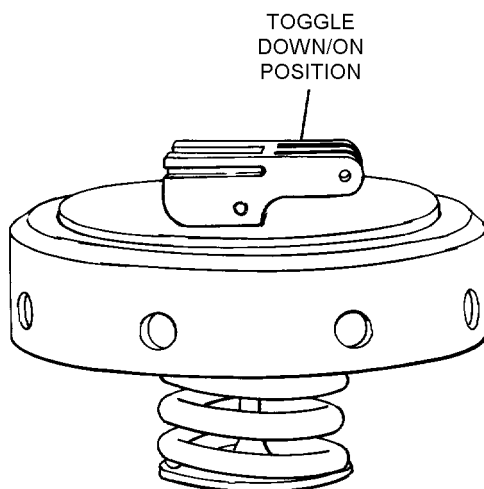
Figure 4-11. SKU-3/A Reducer Assembly



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Figure 4-12. Emergency Oxygen Pressure Reducer Tool Set

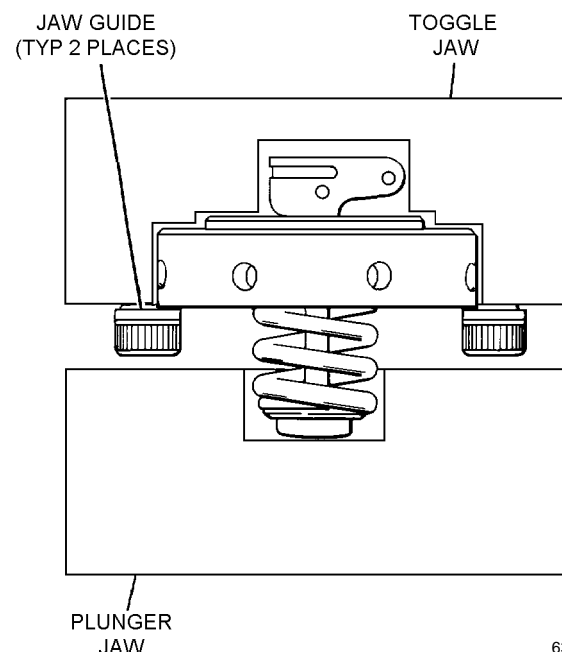
c. Using toggle reset tool, trip/rotate toggle to down (ON) position to reduce tension on toggle and plunger spring assembly.



63-1161

Step 2c - para 4-45

e. Position adjustment assembly in the toggle and plunger jaws.

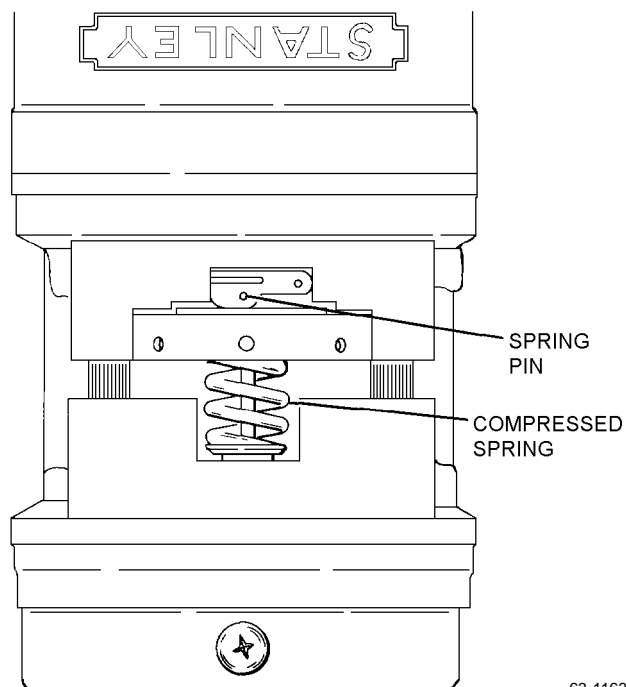


63-1162

Step 2e - Para 4-45

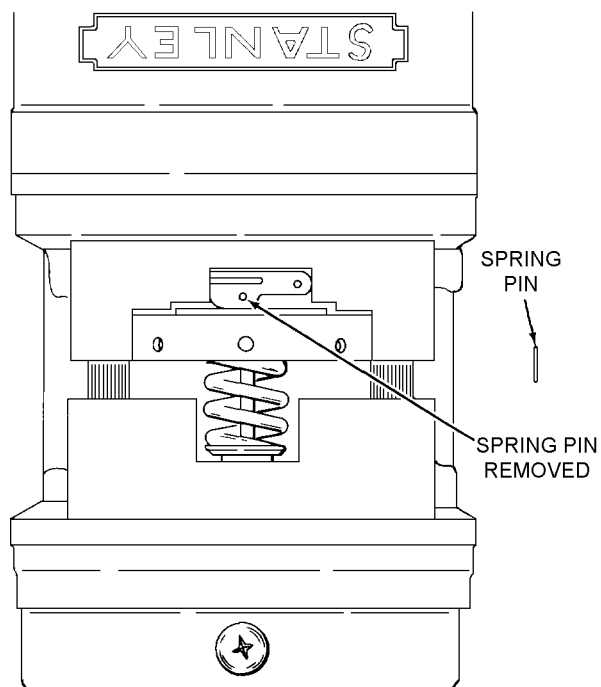
d. Using appropriate Allen key, screw jaw guides into the two threaded holes in the toggle jaw.

f. Place toggle and plunger jaws in a vise. Align fixture and tighten to compress spring and relieve tension on the spring pin and toggle attachment.



Step 2f - Para 4-45

g. Using spring pin removal tool, punch out spring and discard.

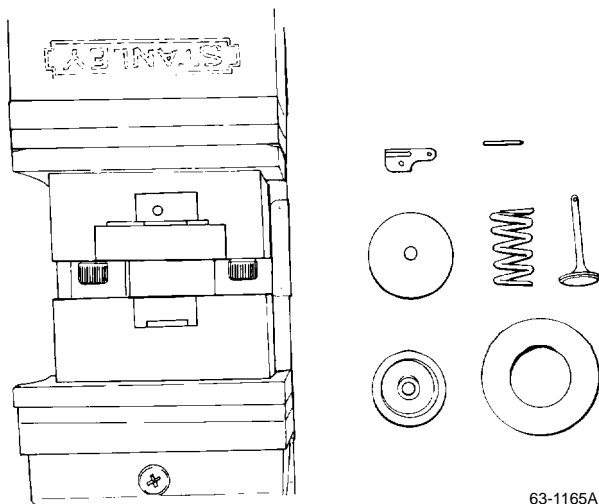


Step 2g - Para 4-45

NOTE

Spring pin is the attachment point of components.

h. Loosen vise jaws to relieve pressure. Remove adjustment assembly from toggle and plunger jaws and disassemble. Replace worn or defective parts as necessary.



Step 2h - Para 4-45

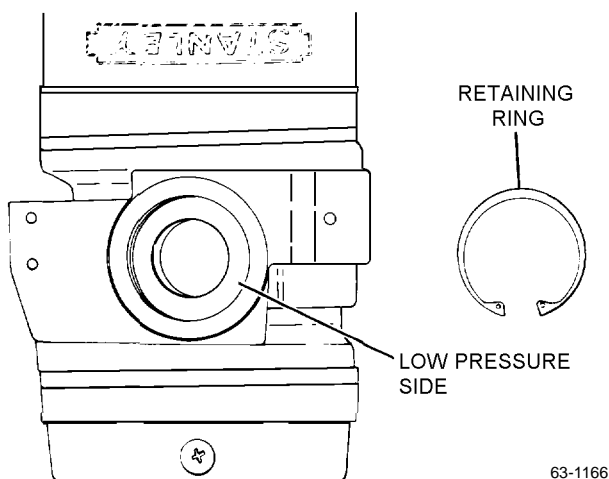
3. Disassemble low pressure assembly as follows:

a. Position oxygen pressure assembly with adjustment side or low pressure side up and secure.

NOTE

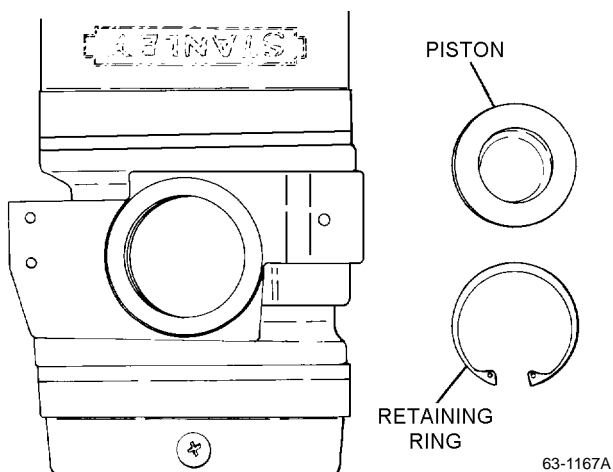
If adjustment assembly has not been removed, remove in accordance with [step 2](#).

- b. Remove retaining ring, using retaining ring pliers (SL0100) or equivalent.



Step 3b - Para 4-45

- c. Remove piston from reducer body bore, using retaining ring pliers with points pressed against piston skirt.



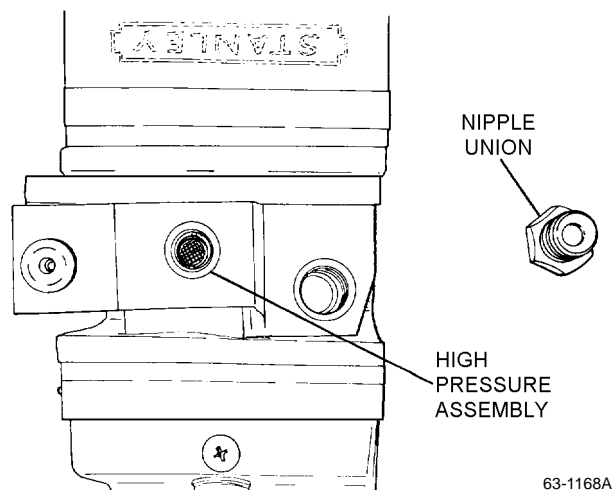
Step 3c - para 4-45

- d. Remove and discard O-ring from piston.

4. Disassemble high pressure assembly as follows:

- a. Position and secure oxygen pressure reducer with high pressure assembly facing up.

- b. Remove nipple union with appropriate wrench.



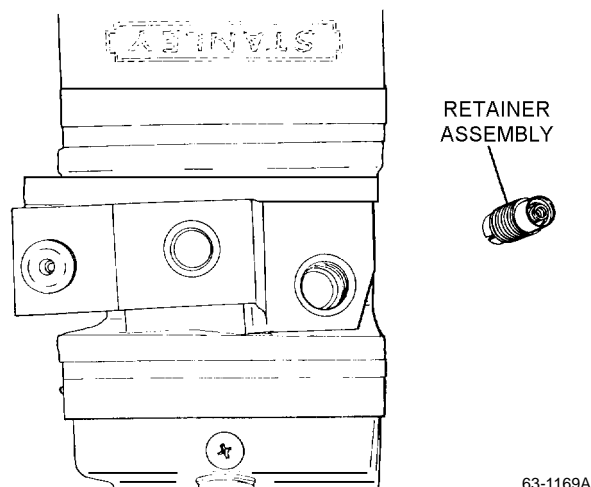
Step 4b - Para 4-45

- c. Remove and discard O-ring from nipple.

NOTE

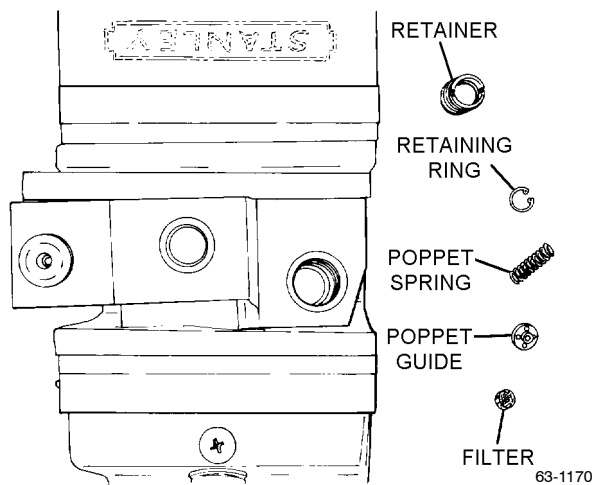
The retaining ring, filter, poppet, guide, and spring usually withdraw from the reducer assembly housing still connected to the retainer unit.

- d. Using torque adapter, remove retainer from reducer body, by rotating counterclockwise.



Step 4d - Para 4-45

- e. Remove retaining ring, using retaining ring pliers (S0100) or equivalent.
- f. Remove filter, poppet guide, and poppet spring from retainer.



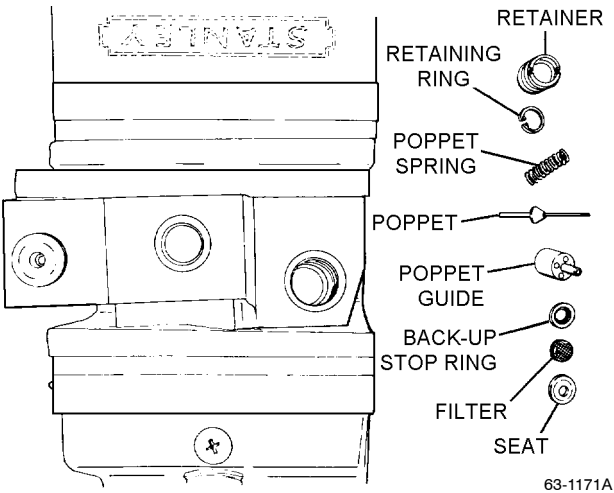
Step 4f - Par 4-45

NOTE

- In some instances seat will not come out with stop, but will remain pressed in reducer sealing groove. Should this occur, follow procedure in step h, and i to remove seat without damage to reducer body.
- g. Invert reducer body and remove poppet, back-up stop ring, and seat.
 - h. (Use only if seat must be dislodged) Insert seat removal tool into reducer body.



- Do not cut into reducer body.
- i. (Use only if seat must be dislodged) Rotate seat removal tool until seat is loosened from reducer sealing groove.
 - j. (Use only if seat must be dislodged) Visually inspect seating area inside reducer body to ensure seat has been dislodged and removed. Also ensure removal of any remaining foreign matter.
 - k. Replace worn or defective parts as necessary.



Step 4k - Para 4-45

4-46. CLEANING.

- 4-47. To clean the disassembled oxygen and non-oxygen components of the kit (except for cushions and fabric components) refer to NAVAIR 13-1-6.4-1.
- 4-48. **CLEANING CUSHIONS AND FABRIC COMPONENTS.** To clean seat cushions and all fabric components, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Cleaning Compound	MIL-C-25769
As Required	Detergent, General Purpose	MIL-D-16741 NIIN 00-282-9699
As Required	Lint-free Cloth, Type II	MIL-C-85043

NOTE

- If using cleaning compound (MIL-C-25769), combine one part compound to three parts water. If using general purpose detergent, follow directions on container.
1. Prepare detergent or cleaning compound (MIL-C-25769) solution.
 2. Apply solution to soiled area with spray or sponge.
 3. Allow solution to remain on surface for a few minutes, then scrub with soft brush or cloth.
 4. Rinse surface thoroughly with water; wipe with cloth or sponge.

NOTE

- Repeat steps 1 through 4 until material is clean.
5. Repeat step 4 until material is free from all solution.

6. Allow material to dry thoroughly.

4-49. INSPECTION.

4-50. Inspect the disassembled parts for distortion, corrosion, and other damage in accordance with table 4-6. Inspect survival items in accordance with NAV-AIR 13-1-6.5, Rescue and Survival Equipment, and NAVAIR 13-1-6.7-2, Aircrew Personal Protective Equipment (Clothing).

4-51. REPAIR AND REPLACEMENT.

4-52. Repair or replace parts of the survival kit assembly as follows:

4-53. REPAIR. Repair of individual components within any assembly is authorized only in accordance with procedures outlined in this manual. All authorized repairs performed shall be documented by making necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series.

4-54. Repair of Cushion Assemblies. Repair of cushion assemblies is limited to sewing of loose or open seams, broken stitches, and small rips and tears.

4-55. Repair/Replacement of Oxygen Gage Window.

Materials Required

Quantity	Description	Reference Number
1	Window, Observation	308411 NIIN 00-059-6401
As Required	Adhesive, Cyanoacrylate or Adhesive, Cellulose Nitrate	MIL-A-46050 NIIN 00-142-9193 MIL-A-388A P/N A-A-529 NIIN 00-270-8150

1. Ensure both surfaces to be bonded are clean and dry.

WARNING

Avoid adhesive contact with skin and eyes.

NOTE

Cure time for adhesive MIL-A-46050 is one hour after parts are mated together.

Cure time for adhesive A-A-529 is 24 hours after parts are mated.

2. Apply small amount of adhesive around edge of window opening in lid assembly and on rim of window.
3. Bond both surfaces together and hold until adhesive is set.

4-55A. Repair/Replacement of Upper Oxygen Cable Protective Rubber Plug/Sheeting.

Materials Required

Quantity	Description	Reference Number
As Required	Adhesive, 3M Scotch-Grip, Rubber and Gasket	EC-847
As Required	Isopropyl Alcohol	TT-I-735
As Required	Scotch-Brite or 220 Grit Sandpaper	L-P-0050
As Required	Applicator, Brush	7237T2
1	Gloves, Butyl Rubber or Ethylene Vinyl Alcohol	—
1	Goggles, Vented	—

1. Lightly scuff the fiberglass lid around the 0.060 hole where the rubber sheet will be adhered with Scotch-Brite or sandpaper to increase the surface area.

2. Wipe surface area to be cleaned with isopropyl alcohol to ensure removal of loose debris, grease, and oil.

WARNING

Avoid eye and skin contact with adhesive. Do not ingest and avoid prolonged breathing of vapors. Use adhesive in well ventilated area.

NOTE

For best results, the temperature of the adhesive and surfaces to be bonded should be at least 65 °F (18 °C). Cure time for EC-847 adhesive is 6 hours.

3. Using the applicator brush, apply a thin layer of adhesive to both surfaces. While adhesive is still wet or aggressively tacky, bond both surfaces together.

4. Hold in place for 15 minutes to set and allow a minimum of 6 hours to cure at room temperatures.

4-56. REPLACEMENT. All individual components that fail to pass inspection shall be replaced except where repair procedures are indicated. Refer to source code listing (SM&R Code) in Numerical Index of Illustrated Parts Breakdown for guidance in determining replaceable components. All adjustable components or assemblies that fail their respective tests shall be readjusted and retested for required specifications.

Table 4-6. Inspection

Component	Task
Survival Kit (Figures 4-19 and 4-20)	
Cushion Assembly	Inspect for fabric damage and loose or broken stitching.
	Ensure button and socket are firmly attached to cushion assemblies.
	Check for wear or breakdown of cushion foam and replace as required.
Dropline Assembly	Inspect boot for fabric damage and loose, broken or frayed stitching.
	Check dropline for material damage, loose, frayed or broken stitching.
Harness Assembly	Check harness assembly for retention pin damage and presence of locknut.
	Inspect aft-most hole serving as attachment for lug pin for elongation.
	Check webbing for wear, damage and for frayed, broken or loose stitching.
	Inspect adapter for obvious damage, corrosion, and wear.
	Check force required for adjuster to release webbing. <u>Maximum pull force on yellow webbing tab shall not exceed 8 lbs.</u>
Release Handle Assembly	Check molded grip for cuts and breaks.
Liferaft Cover	Examine for damaged fabric and loose, broken or frayed stitching.
Equipment Container Assembly	Check slide fastener for security of attachment and trouble-free operation.
	Inspect container material for damage and for loose, broken or frayed stitching.
Survival Items	Inspect in accordance with NAVAIR 13-1-6.5.
Lid Assembly (Figure 4-21)	
Lid Assembly	Inspect for cracks, damage to fiberglass and attached extruded metal lip.
Pile Tape Fasteners	Check oxygen release ring assembly pile tape retainer for secure attachment to fiberglass lid.
Snap Fastener	Inspect snap fastener studs and bolts for defects, corrosion, and secure attachment to lid.
Plug and Cap Assembly	Inspect chain, plug and cap for damage.
	Ensure that chain is securely riveted to plug and cap.
Carrying Handle	Check webbing for wear, damage, and for frayed, broken or loose stitching.

Table 4-6. Inspection (Cont)

Component	Task
Lid Assembly (Figure 4-21) (Cont)	
Oxygen Cylinders	Inspect end fittings for damage.
	Check cylinders for bulges, cracks, nicks, gouges or scratches which penetrate metal.
Manual Oxygen Release	Inspect handle and cable for obvious defects.
Automatic Oxygen Release	Check cable housing for obvious damage and secure attachment to conduit.
	Inspect knurled end fitting.
	Inspect coupling assembly for spring security.
	Ensure that the coupling assembly has not separated from the rest of the cable.
Cable Assemblies	Check balls for secure attachment on respective cables.
	Examine cables for deformation, broken strands or other obvious defects.
	Check conduits for loose or cracked joints, cracked tubing, flattened, dented or out of round tubing diameters.
Check Valve	Inspect for damaged threads and rounded hexagon flats.
Lid Latches	Check for damage and misalignment.
Manifold Assembly (Figure 4-22)	
Check Valve	Inspect for damaged threads and rounded hexagon flats.
Relief Valve	Inspect for damaged threads and rounded hexagon flats.
Manifold Body	Inspect manifold for thread damage.
Reducer Assembly (Figure 4-23)	
Oxygen Gage	Check gage for broken or missing glass and broken or jammed needle.
Filler Valve Assembly	Inspect for damaged threads, rounded hexagon flats and condition of valve core.
Toggle	Visually inspect toggle resetting slot for galling. Examine pinholes for wear and damage.
Body	Check for gouges and other obvious damage. Inspect threads for damage.
Container Assembly (Lower) (Figure 4-24)	
Lower Container Assembly	Check for cracks and damage to fiberglass and attached extruded metal lip. Ensure that extruded metal lip is secured to fiberglass and there is no separation between parts. If fiberglass is cracked, replace component.
Handle Protector	Examine pad for general condition and security of attachment.

Table 4-6. Inspection

Component	Task
Container Assembly (Lower) (Figure 4-24) (Cont)	
Radio Bracket Assembly	Check bracket for secure attachment to container. Examine hook and pile tapes for security of attachment.
Pile Tape	Check all tape fasteners for secure attachment to fiberglass container.
Pad	Examine pad for general condition and security of attachment.
Lock Assemblies (Figures 4-25 and 4-26)	
Cover	Check for distortion and cracks in area of holes.
All Locknuts and Nipples	Inspect for cracks and thread damage.
	Check for rounded corners of hexagon flats.
Housing	Inspect holes and threads for damage.
Slide	Check slides for distortion and for damage to ends which engage lid latches.
Conduits and Cables	Check for broken, bent or crushed conduits.
	Inspect cables for damaged or broken strands; check security of terminal balls on cables.
Lid Lock Release Assembly (Figure 4-27)	
Cover	Check for distortion and cracks in area of holes.
Housing	Inspect holes and threads for damage.
Lid Lock Release	Check for damage, corrosion or any other defects.

4-57. (East/West Only) Replacement of Lapbelt

Adjuster. To replace missing or damaged lapbelt adjuster on the restraint harness, proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Adjuster, Lapbelt	184C100-1 (CAGE 30941)
As Required	Sealing Compound, Locking and Retaining, Grade A	MIL-S-22473 (Note 1)

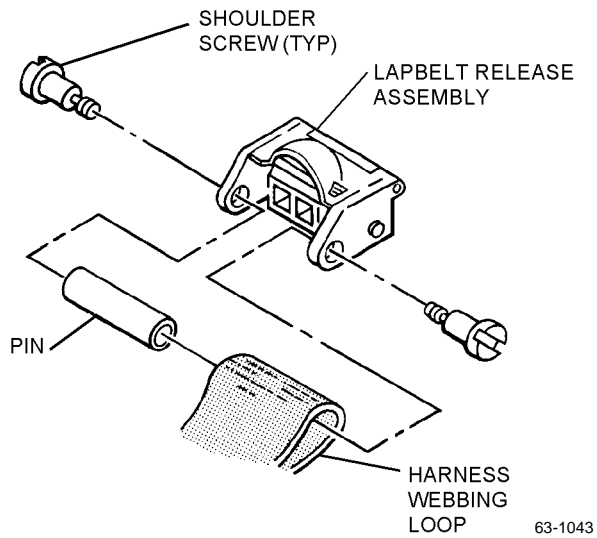
Notes: 1. Use any contrasting color.

NOTE

Replacement procedures can be used on both right and left restraint harness assemblies.

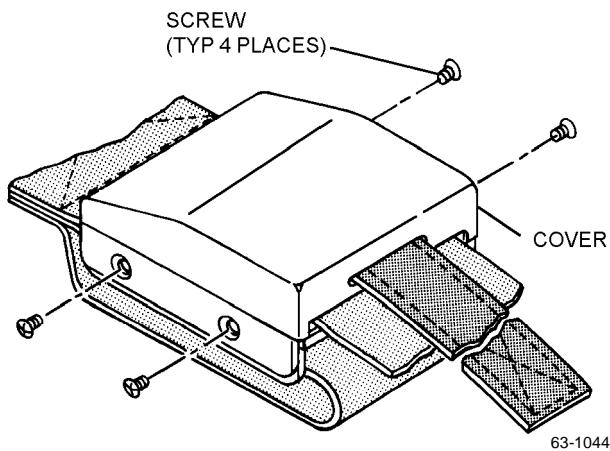
1. Remove existing lapbelt adjuster from restraint harness as follows:

a. Remove lapbelt release assembly by removing two shoulder screws. Pull release assembly away from webbing, and slide pin out of harness webbing loop. Retain all parts.



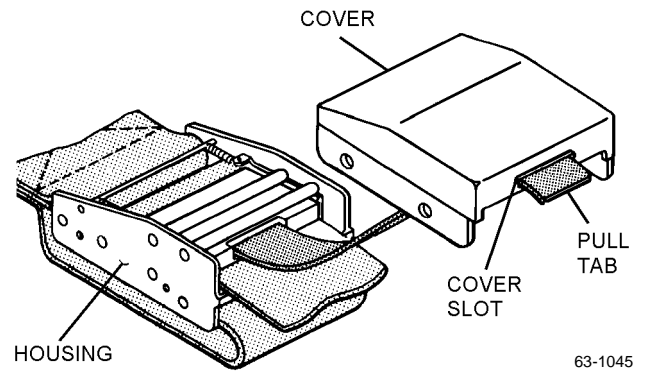
Step 1a - Para 4-57

b. Remove four screws (two on each side) from cover of lapbelt adjuster assembly.



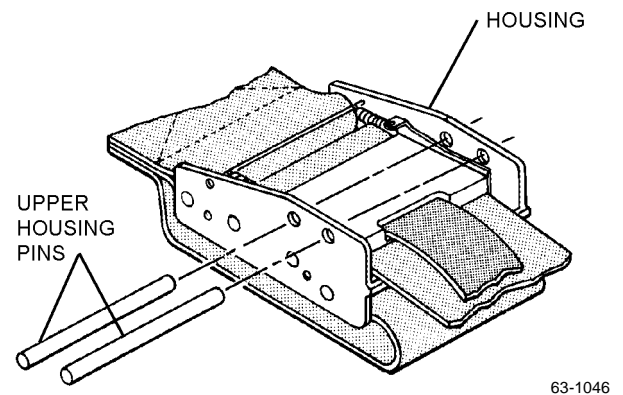
Step 1b - Para 4-57

c. Remove cover from lapbelt adjuster housing, and slide pull tab through cover slot.



Step 1c - Para 4-57

d. Slide upper housing pins out of housing.



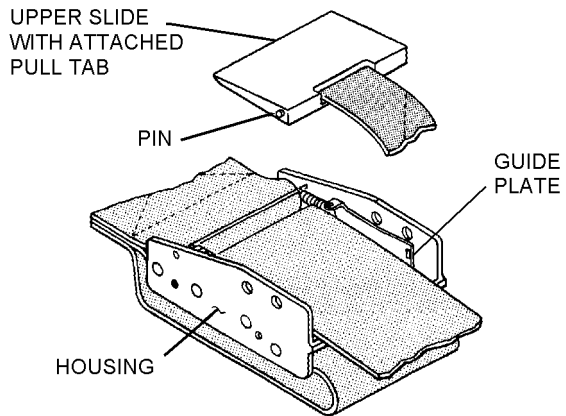
Step 1d - Para 4-57

NOTE

Slides are held to guide plates by pins. Pull slide up so guide plates are above edge of housing, and rotate slide out of guide plates.

NAVAIR 13-1-6.3-2

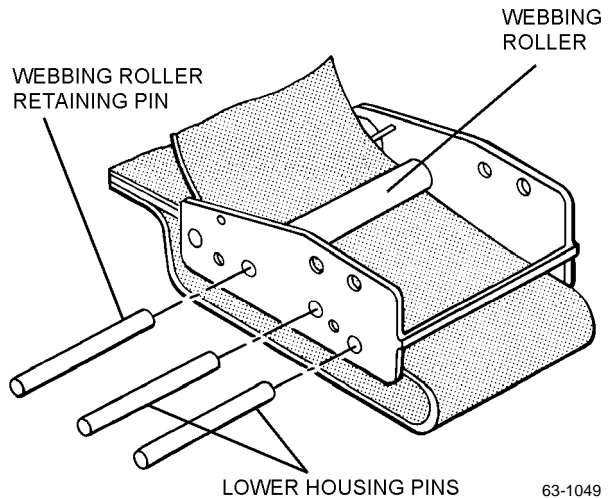
e. Remove upper slide with attached pull tab.



63-1047

Step 1e - Para 4-57

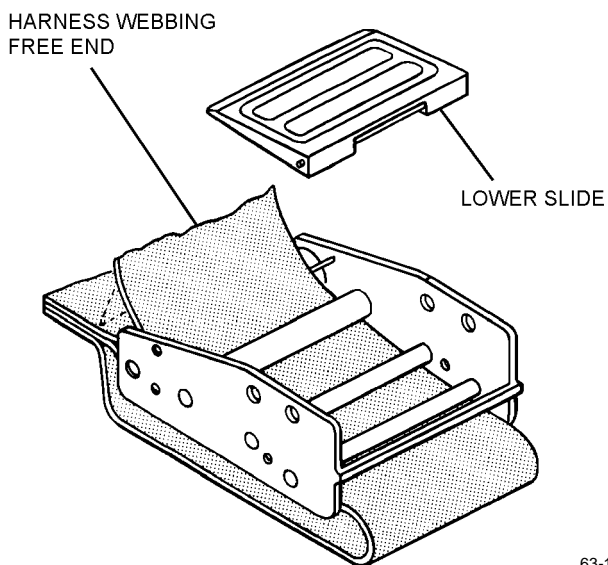
g. Position guide plates up and out of way. Remove two lower housing pins and webbing roller retaining pin. Webbing roller will fall away.



63-1049

Step 1g - Para 4-57

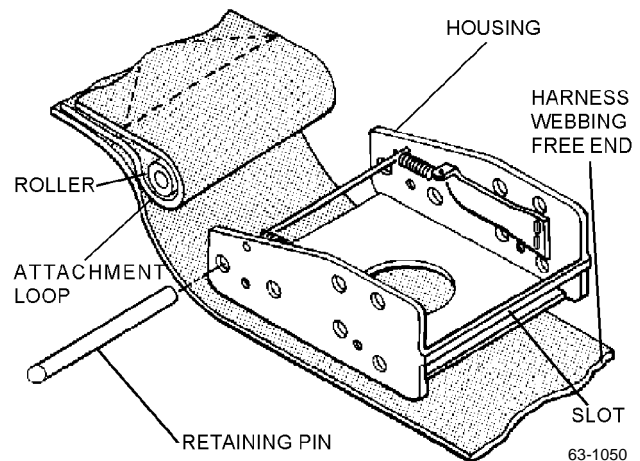
f. Lift free end of harness webbing, and remove lower slide.



63-1048

Step 1f - Para 4-57

h. Pull free end of harness webbing through in housing. Remove pin retaining harness webbing attachment loop roller. Housing will fall away.



63-1050

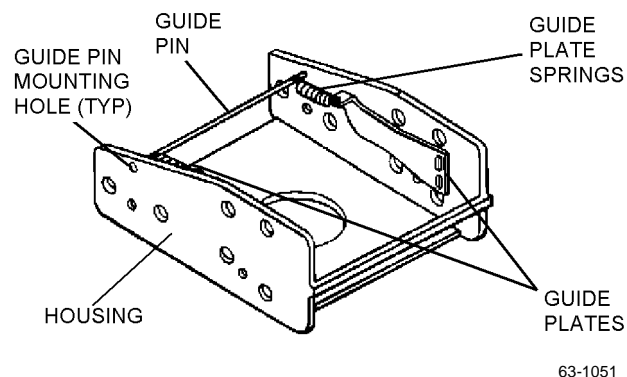
Step 1h - Para 4-57

2. Install new lapbelt adjuster as follows:

NOTE

The six pins (two retaining and four housing) are interchangeable. The two rollers are interchangeable.

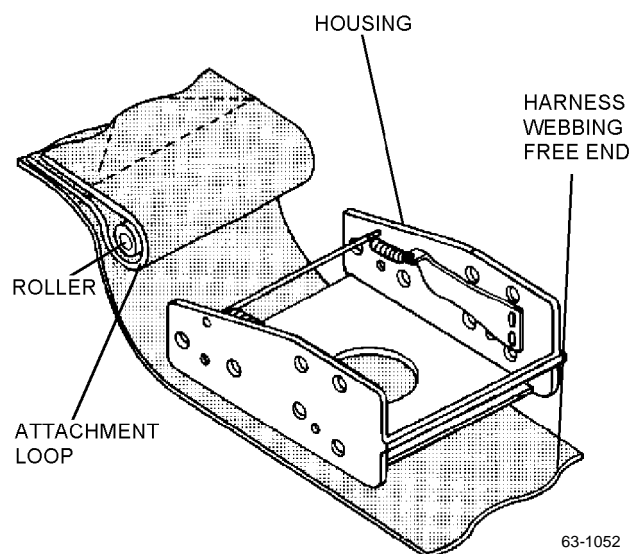
a. If required, slide guide plate springs onto guide pin; ensure that guide plates are positioned correctly. Install assembly into adjuster housing guide pin mounting holes.



63-1051

Step 2a - Para 4-57

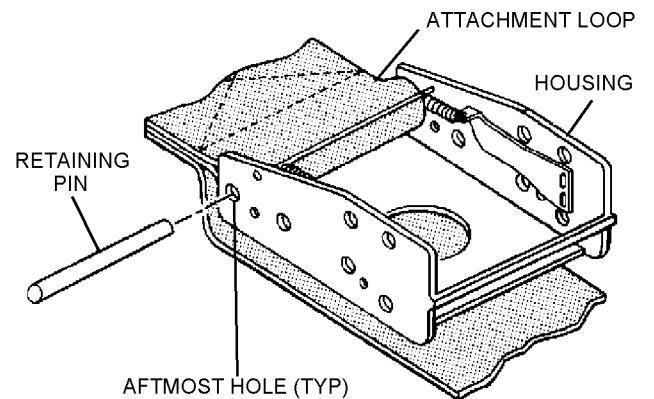
b. Insert roller into attachment loop of harness webbing. Place adjuster housing on top of free end of harness webbing so that aft end of housing faces attachment loop.



63-1052

Step 2b - Para 4-57

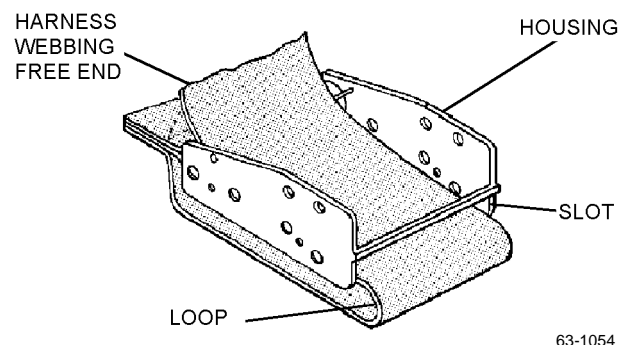
c. Position housing onto attachment loop and roller. Align hole through roller with aftmost holes in housing, and install retaining pin.



63-1053

Step 2c - Para 4-57

d. Fold free end of webbing back toward housing. Insert end through slot in housing to form loop in webbing forward of adjuster. Guide plates may be positioned up and back to avoid any interference.

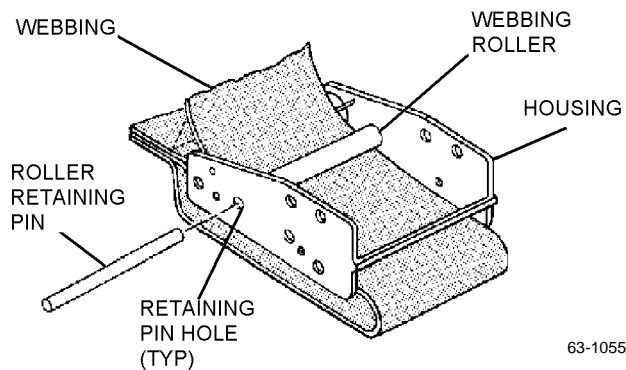


63-1054

Step 2d - Para 4-57

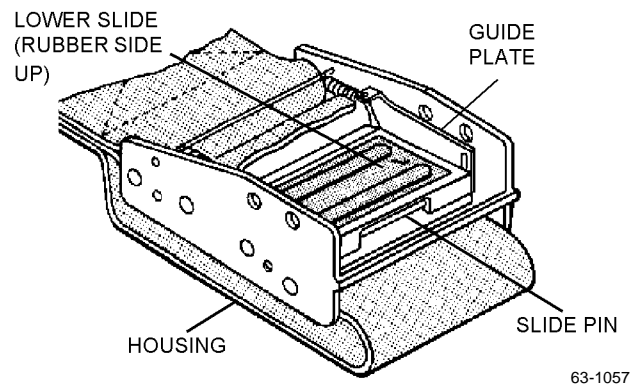
NAVAIR 13-1-6.3-2

e. Install webbing roller into housing on top of webbing. Position roller to align with proper holes in housing, and insert roller retaining pin.



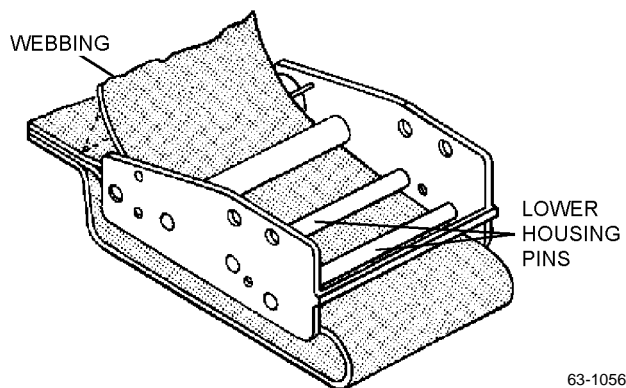
Step 2e - Para 4-57

g. Position guide plates into housing on top of lower housing pins; install lower slide rubber side up. Ensure that slide pin is correctly positioned into lower slots of guide plates.



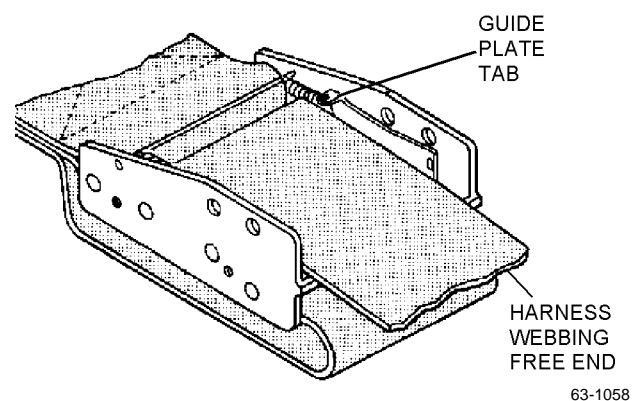
Step 2g - Para 4-57

f. Insert lower housing pins; ensure that pins are resting on top of webbing.



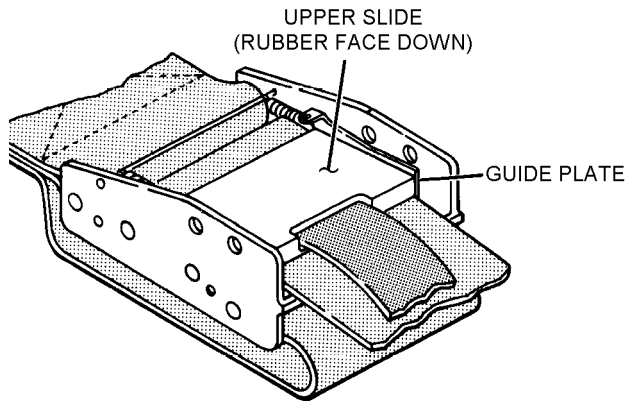
Step 2f - Para 4-57

h. Position harness webbing free end under tabs of guide plates, and lay webbing down over lower slide.



Step 2h - Para 4-57

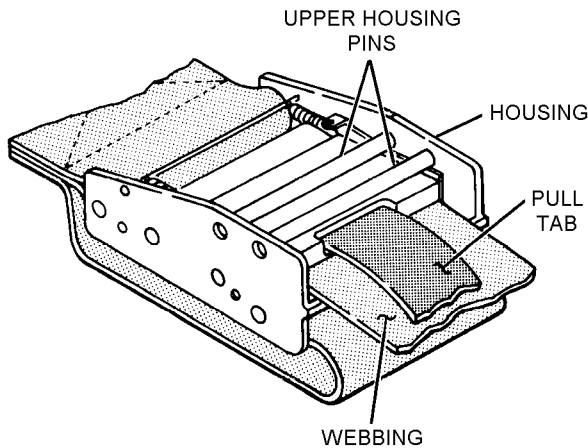
i. Install upper slide, rubber face down. Ensure that lower slide does not come out of place. Ensure that slide pins sit securely in slots of guide plates.



63-1059

Step 2i - Para 4-57

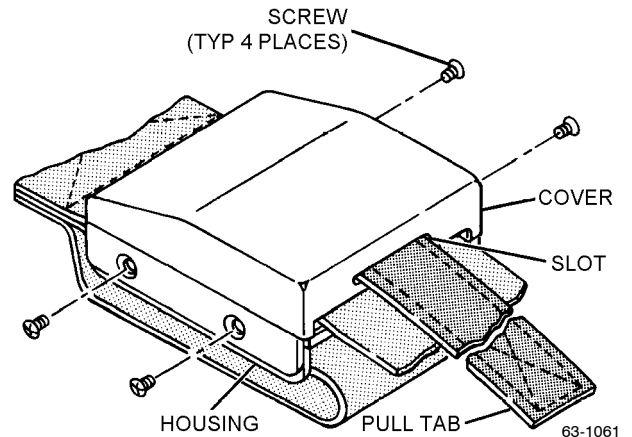
j. Install upper housing pins. Ensure that slides operate correctly; pull on pull tab to check simultaneous movement of slides. Webbing shall slide with ease through adjuster in either direction.



63-1060

Step 2j - Para 4-57

k. Insert pull tab from inside out through slot in cover. Place cover on housing and align four screw holes. Apply sealing compound to threads of four screws, and secure cover to housing.



63-1061

Step 2k - Para 4-57

3. Apply sealing compound to threads of two shoulder screws, and install lapbelt release assembly removed in [step 1a](#).

4. Make necessary entries on appropriate form in accordance with OPNAVINST 4790.2 Series.

4-58. Deleted.

Pages 4-57 thru 4-60 - Deleted.

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4-59. ASSEMBLY.**NOTE**

Apply the tamper dot on the oxygen hose assembly fitting in a manner which provides easy identification for inspection purposes when seat kit is installed in seat.

Use any contrasting color when applying tamper dots to oxygen fittings.

4-60. Assemble using index numbers of figure 4-19 through 4-27 for reference. When applying sealing compound to threaded parts, first clean contaminants from threads using clean cloth moistened with clean water. Apply sealing compound to 50% of the threads of applicable parts. Refer to Appendix B and ensure all nuts and fittings are properly torqued. After all nuts and fittings are properly torqued, apply tamper dots to oxygen fittings shown in figures 4-19 through 4-27. Use lacquer MIL-L-7178, Fe, St, 595.

Materials Required

Quantity	Description	Reference Number
As Required	Krytox 240 AC, Type III	MIL-G-27617 NIIN 00-961-8995
As Required	Leak Detection Compound, Type I	MIL-L-25567
As Required	Heptane	—
As Required	Solid Film Lubricant	5306 (CAGE 85932)
As Required	Thread Locking Compound	VC3 (CAGE 04866) NIIN 00-163-5792

Materials Required (Continued)

Quantity	Description	Reference Number
As Required	Adhesive	EpoxyLite 8751 (CAGE 11147)
As Required	Adhesive	EC847 (CAGE 76381)
As Required	Adhesive, Type I, Class 2	MIL-A-46050
As Required	Adhesive, Polychloroprene	MIL-A-5540

1. Assemble pressure reducer assembly in accordance with paragraph 4-61.

NOTE

Standard torque values apply to nuts and fittings except for the following:

The pressure reducer (18, figure 4-23) is torqued to 32 to 35 lb-in after assembly. In the oxygen hose assembly (NAVAIR 13-1-6.3-1), the inlet tubing connector is torqued to 80 to 100 lb-in; the outlet tubing connector is torqued to 100 to 125 lb-in.

2. Assemble survival kit in reverse order of disassembly. Refer to paragraph 4-43.

3. Purge and charge emergency oxygen system in accordance with paragraph 4-38.

4. Perform functional check of emergency oxygen system in accordance with paragraph 4-37.

5. Adjust in accordance with paragraphs 4-62 through 4-66 as necessary.

4-61. ASSEMBLY OF PRESSURE REDUCER ASSEMBLY. The following procedures assemble the reducer assembly in four major operations: assembly of the high pressure assembly; assembly of low pressure assembly; assembly and preadjustment of the adjustment assembly; and assembly of oxygen gage, filler valve, adapter, and plug. It is imperative that the following assembly sequence be followed if the entire reducer; assembly has been disassembled. See figure 4-13 and proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
1	Vise	—
1	Pressure Reducer Tool Set (see figure 4-14)	T216D900-1 (CAGE 30941) NIIN 01-100-8928
1	Retaining Ring Pliers	S0100 (CAGE 79136)
1	Retaining Ring Pliers	SL0100 (CAGE 79136)
1	Torque Wrench 0-150 in-lb	TE-6FUA (CAGE 55729) or Equivalent
1	Toggle Reset Tool	Fabricate IAW paragraph 4-69

Materials Required

Quantity	Description	Reference Number
1	Krytox 240 AZ Type I	MIL-G-27617
As Required	Tape, Anti-seize	MIL-T-27730
As Required	Thread Locking Compound	VC-3 (CAGE 04866)
As Required	Plastic Bag	MIL-B-117
2	O-Ring	MS9068-012
1	O-Ring	MS28775-117
1	Pin, Spring	MS171435
1	Filter	204B419-11



Do not use oil or any material containing oil in conjunction with oxygen equipment. Oil, even in a minute quantity, coming in contact with oxygen can cause explosion or fire. Dust, lint, and fine metal particles are also dangerous.

NOTE

Maintenance personnel are cautioned to read and thoroughly understand each step prior to attempting any maintenance action.

Discard and replace all packings, seals, cotter pins, and Teflon sealing tape removed during disassembly of emergency oxygen system.

All complete assemblies not immediately being returned to service shall be sealed in plastic bags with all external fittings properly capped.

- 1. Assemble high pressure assembly as follows:

NOTE

If the entire reducer assembly has not been disassembled it is necessary to remove the adjustment assembly and low pressure assembly to correctly perform the following assembly procedures.

- a. Ensure that the adjustment assembly has been removed in accordance with paragraph 4-45.
- b. Ensure that the low pressure assembly has been removed in accordance with paragraph 4-45.
- c. Ensure that all oxygen components to be assembled have been properly cleaned in accordance with NAVAIR 13-1-6.4-1.
- d. Position retainer with threaded side down.

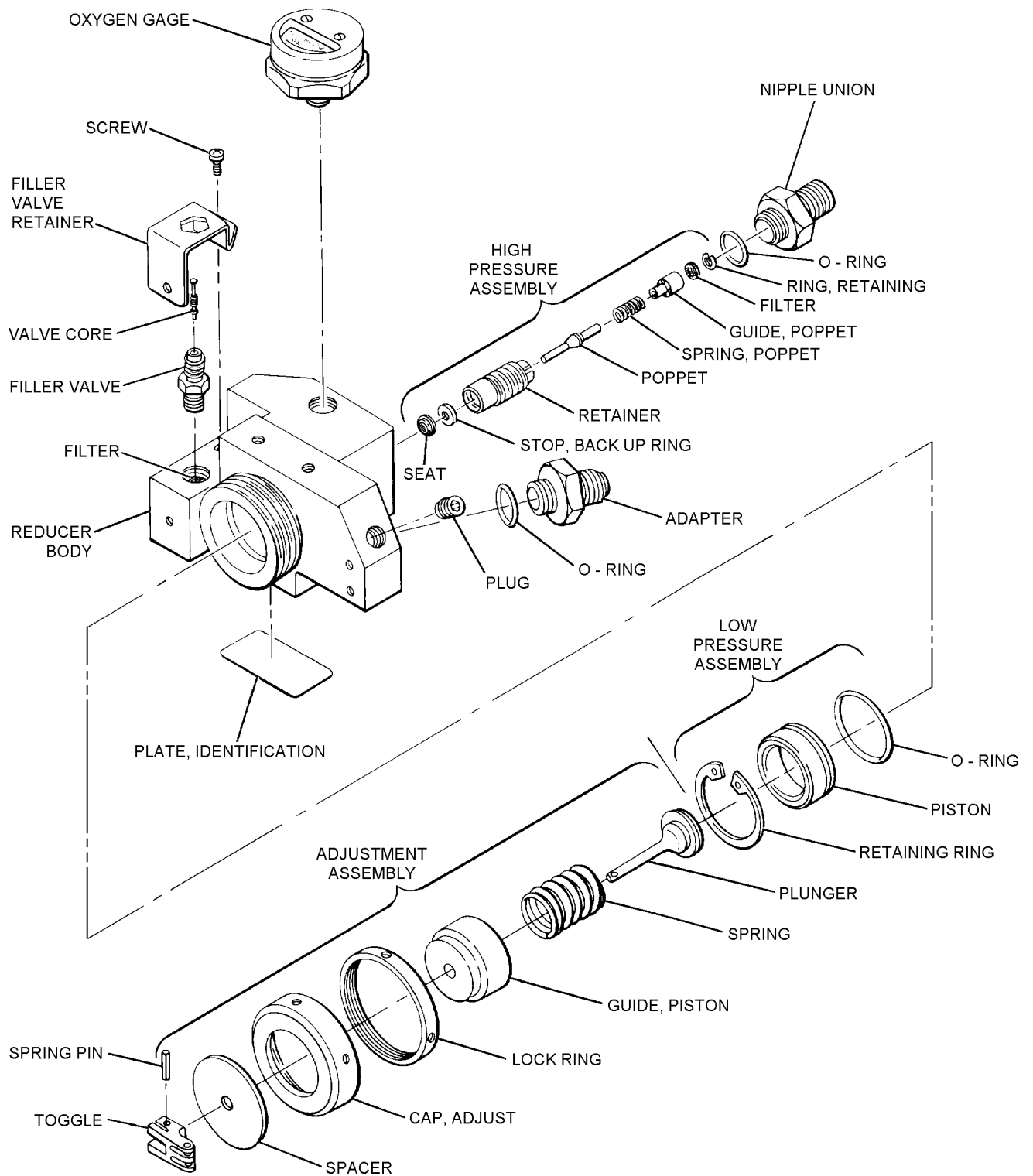
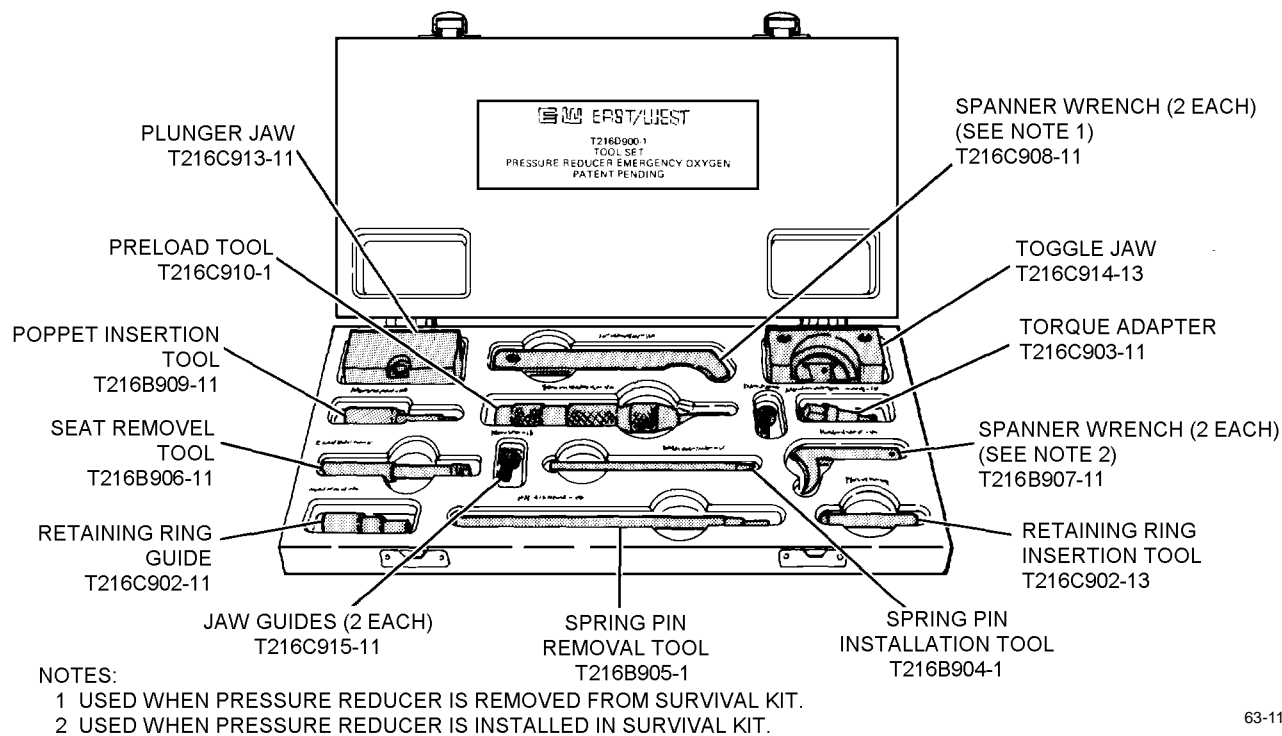


Figure 4-13. SKU-3/A Reducer Assembly

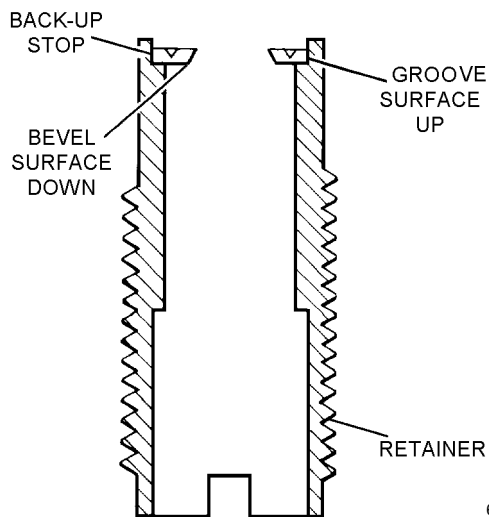
63-1158



63-1157

Figure 4-14. Emergency Oxygen Pressure Reducer Tool Set

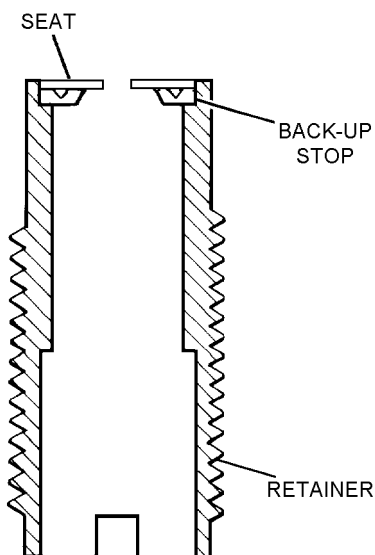
e. Install backup stop in upper groove of retainer, positioning bevel surface down and groove surface up.



63-1172

Step 1e - Para 4-61

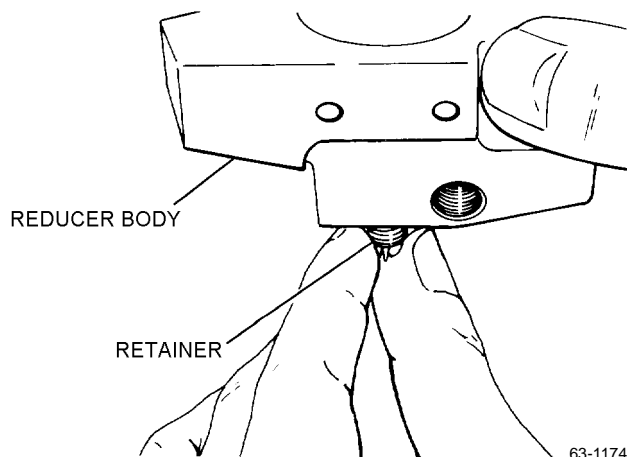
f. Place seat on top of backup stop ensuring proper alignment within retainer groove. Push firmly on seat with finger so that seat is retained in place.



63-1173

Step 1f - Para 4-61

g. While holding retainer in an upright position with backup stop and seat positioned on top, lower reducer body onto retainer and slowly screw retainer into high pressure inlet port of reducer body.

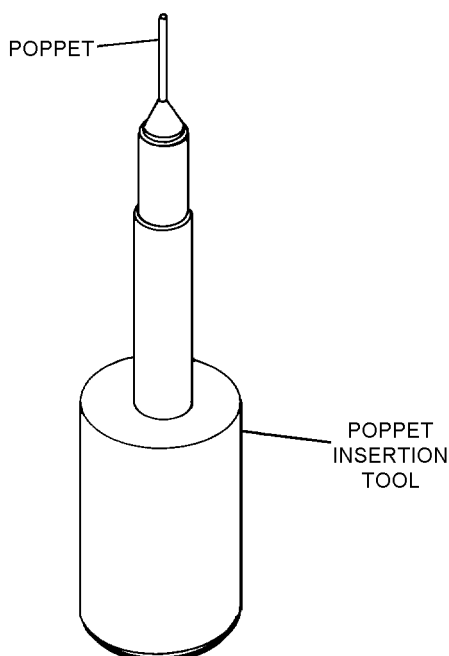


Step 1g - Para 4-61

h. Using torque adapter mounted on a 3/8-inch nut driver, continue screwing retainer into high pressure port until snug. Visually inspect for proper alignment of backup stop and seat into reducer body.

i. Torque retainer into reducer body to 32 to 35 lb-in, using retainer torque adapter and torque wrench.

j. Using poppet insertion tool, place poppet into tool so that cone-shaped part of poppet faces away from heavy end of tool.

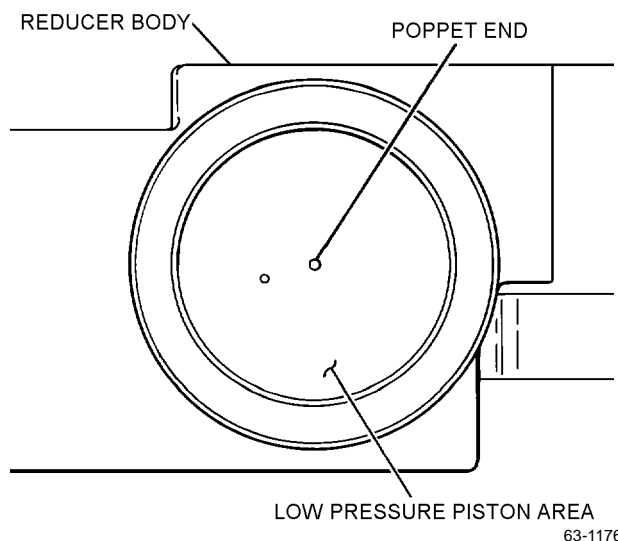


Step 1j - Para 4-61



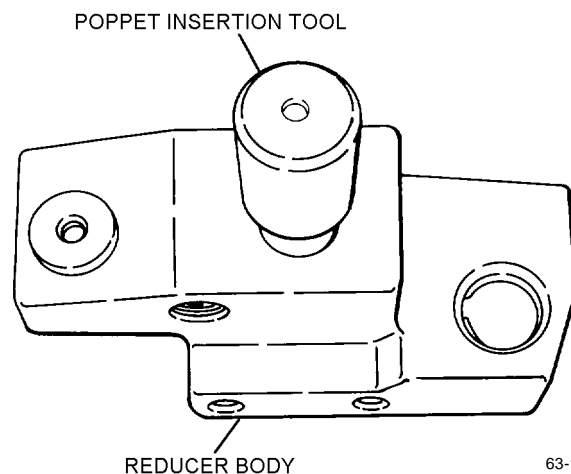
Be careful when inserting poppet that no pressure is applied which could bend poppet shaft. Be certain end of poppet extends into low pressure piston area.

k. Hold reducer body/housing with high pressure retainer side down. Slowly lower reducer housing onto poppet. Carefully rock and turn poppet insertion tool until poppet end is seen to extend into lower pressure piston area.



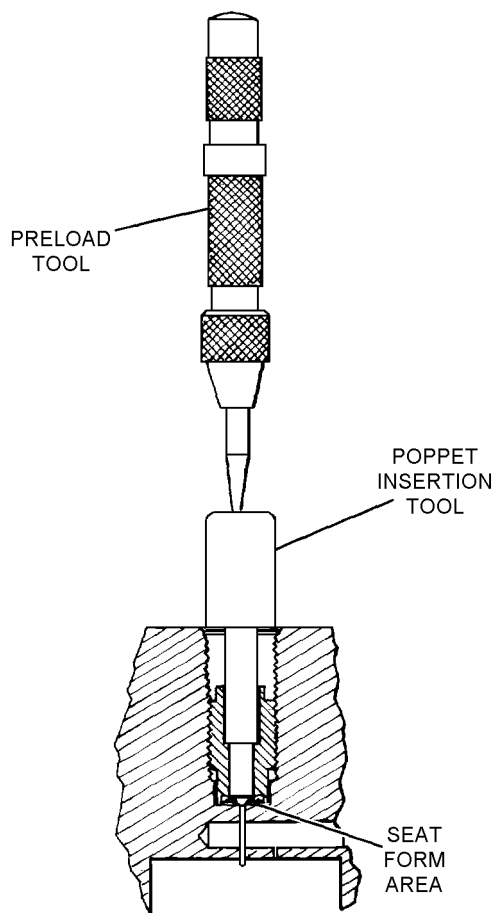
Step 1k - Para 4-61

l. Leaving poppet insertion tool inserted, turn entire assembly over so that high pressure or retainer assembly and poppet insertion tool are now facing up.



Step 1l - Para 4-61

m. Place preload tool into dimple on top of poppet insertion tool. Press down once on preload tool until it unloads with a snap. This forms seat into its correct angle.

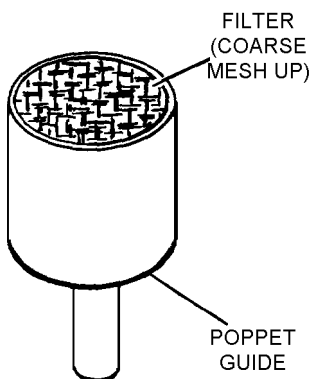


Step 1m - Para 4-61

63-1178

n. Remove poppet insertion tool so that poppet remains positioned inside reducer body against seat.

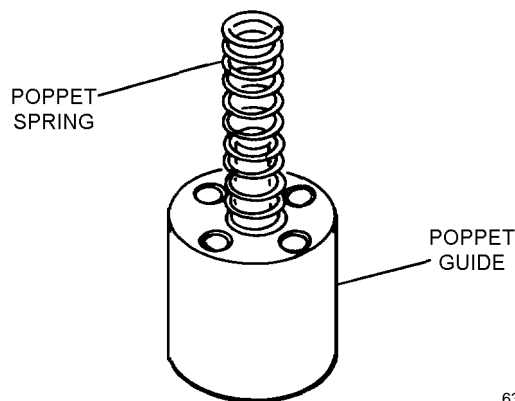
o. Press filter with coarse mesh up into wide end of poppet guide.



Step 1o - Para 4-61

63-1179

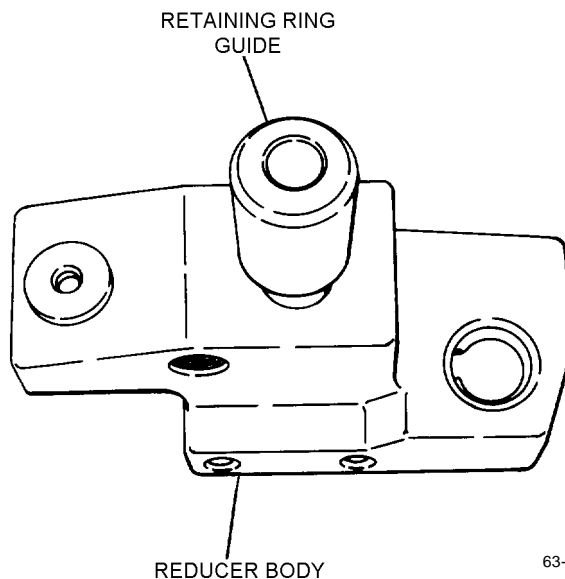
p. Secure poppet spring to poppet guide by pressing spring onto shaft end of guide.



63-1180

Step 1p - Para 4-61

q. Position retaining ring guide into retainer so that the tool engages tangs of retainer.

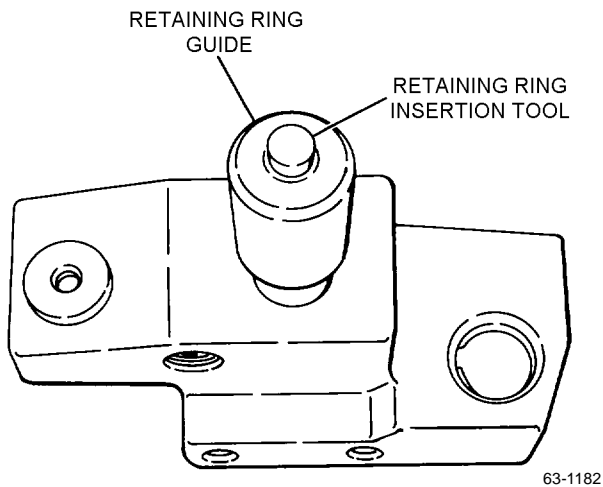


63-1181

Step 1q - Para 4-61

r. Insert poppet guide and spring, with spring end down, into opening in retaining ring guide.

s. Using retaining ring insertion tool, ensure that poppet guide and spring are properly positioned inside retainer.

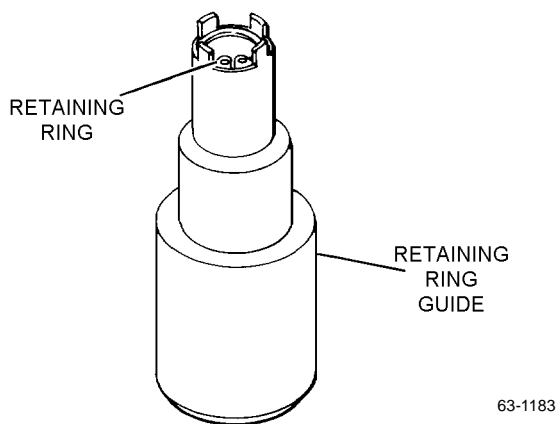


Step 1s - Para 4-61

t. Remove retaining ring insertion tool and retaining ring guide from reducer housing.

u. Visually check that filter end of poppet guide is slightly higher than ends of retainer.

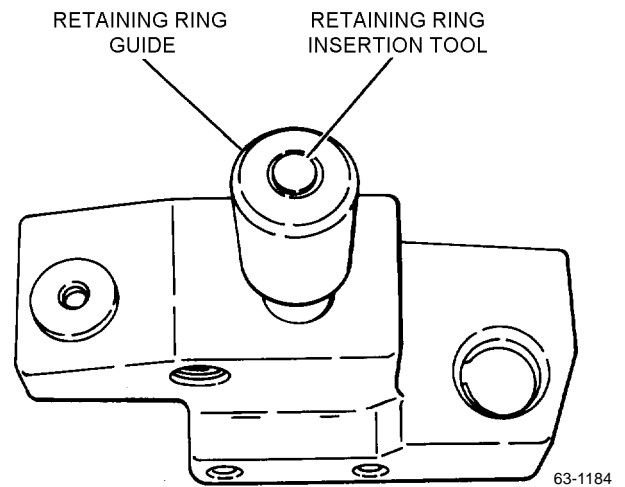
v. Using retaining ring pliers, install retaining ring inside tangs of retaining ring guide.



Step 1v - Para 4-61

w. Insert retaining ring guide into tangs of retainer. Insert retaining ring insertion tool into retaining ring guide.

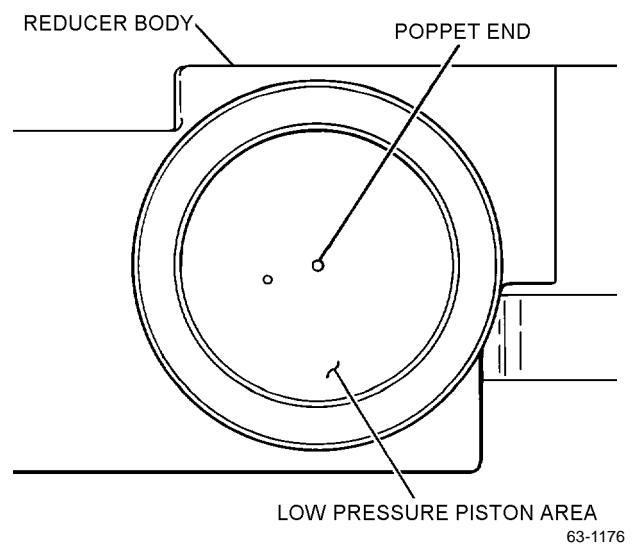
x. Compress poppet spring and seat retaining ring by pressing down on retaining ring insertion tool until flush with top of retaining ring guide.



Step 1x - Para 4-61

y. Remove retaining ring guide and insertion tool. Ensure retaining ring is properly seated in groove.

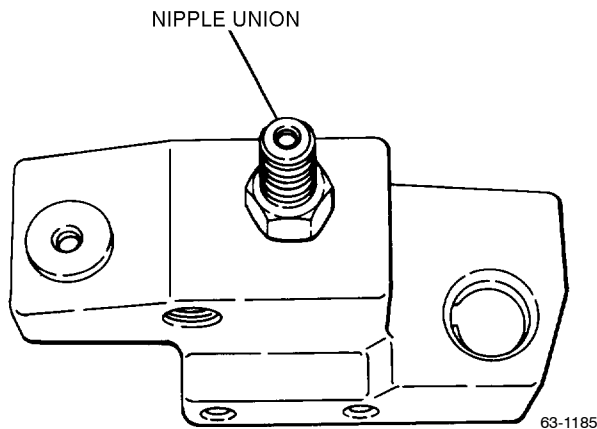
z. Verify that tip of poppet extends into lower pressure piston area.



Step 1z - Para 4-61

NAVAIR 13-1-6.3-2

aa. Lubricate new O-ring and mating surfaces with Krytox 240 AZ. Install O-ring on nipple union and install nipple union into reducer housing.



Step 1aa - Para 4-61

2. Assemble low pressure assembly as follows:

a. Ensure that high pressure assembly is properly assembled in accordance with [step 1](#).

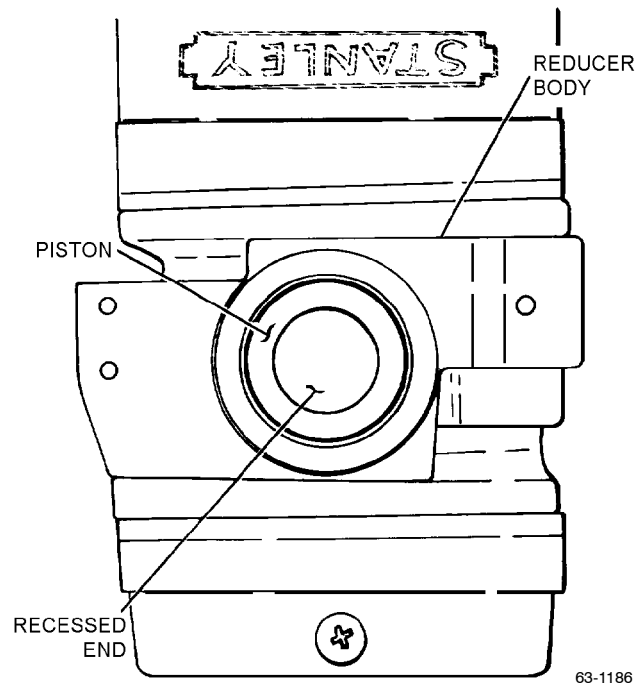
b. Ensure that all oxygen components to be assembled have been properly cleaned in accordance with NAVAIR 13-1-6.4-1.

c. Position oxygen pressure reducer with adjustment side or low pressure side up and secure.

d. Lubricate new O-ring and mating surfaces with Krytox 240 AZ. Install O-ring on piston.

e. Lubricate bore of reducer body with Krytox 240 AZ.

f. Install piston, recessed end out, in bore of reducer body.



Step 2f - Para 4-61

g. Install retaining ring, using retaining ring pliers.

3. Assemble and preadjust adjustment assembly as follows:

a. Ensure that high pressure and low pressure assemblies have been properly assembled in accordance with [steps 1 and 2](#).

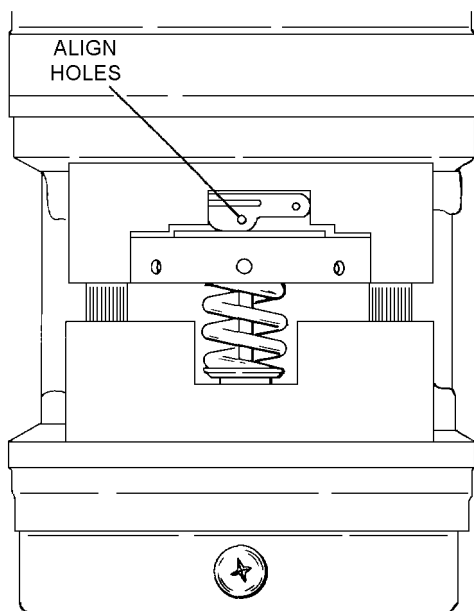
b. Ensure that all oxygen components to be assembled have been properly cleaned in accordance with NAVAIR 13-1-6.4-1.

c. Using appropriate Allen key, screw jaw guides into two threaded holes in toggle jaw.

d. Place toggle and plunger jaws in vise.

e. Assemble adjustment assembly components in proper sequence ([figure 4-13](#)). Position components in toggle and plunger jaws.

f. Apply vise pressure to compress spring. Align hole in toggle with hole in plunger end.



63-1187

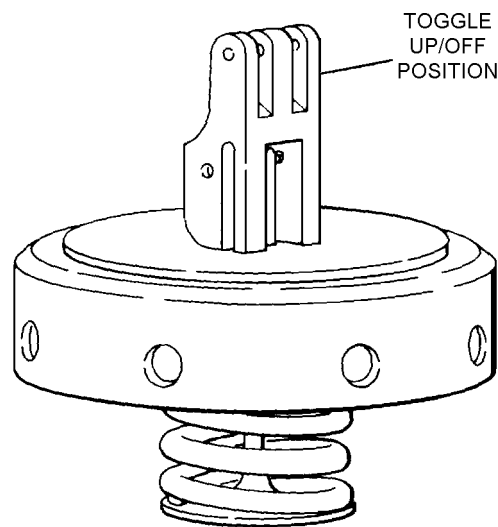
Step 3f - Para 4-61

g. With hole in toggle and hole in plunger aligned, insert new spring pin using spring pin installation tool. Insert spring pin into toggle hole as far as tool will permit. Remove tool and gently drive remainder of spring into toggle, using drift pin.

h. Slowly open vise jaws and ensure that assembly is properly secured.

i. Remove adjustment assembly from toggle and plunger jaws.

j. Using toggle reset tool, rotate toggle to upright (OFF) position.



63-1188

Step 3j - Para 4-61

k. Position reducer assembly with cap adjustment side up.

l. Install lock ring onto reducer body.

NOTE

Ensure lock ring does not contact adjustment assembly during installation.

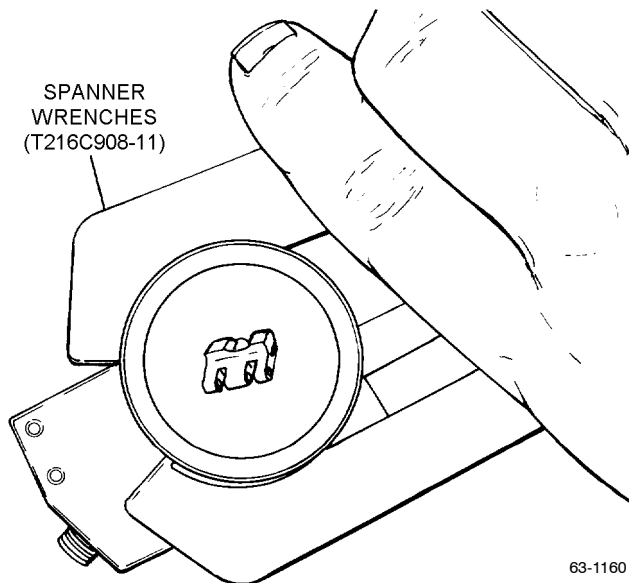
m. Install adjustment assembly onto reducer body by engaging screw threads and rotating clockwise to its lowest position.

n. Back off adjusting cap two complete turns for preadjustment.

o. Turn lock ring counterclockwise until snug with adjusting cap.

NAVAIR 13-1-6.3-2

p. Place one spanner wrench (T216C908-11) in lock ring and second spanner wrench on adjusting cap and secure.



Step 3p - Para 4-61

4. Assemble oxygen gage, filler valve, adapter, and plug (figure 4-13) as follows:

a. Ensure all oxygen components to be assembled have been properly cleaned in accordance with NAVAIR 13-1-6.4-1.

b. Apply antiseize tape to threads of oxygen gage. Install gage.

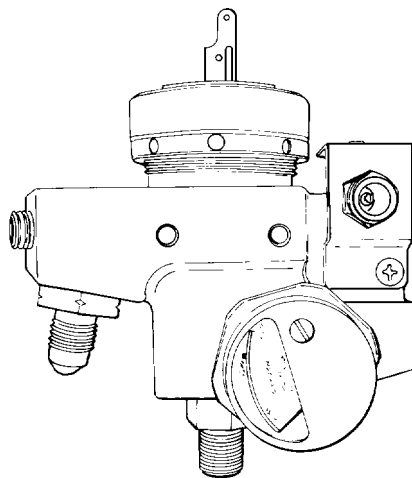
c. Install new filter in filler valve port.

d. Apply antiseize tape to threads of filler valve assembly. Install filler valve assembly.

e. Place retainer over valve body. Apply thread locking compound to screw thread. Insert two screws into retainer and fasten.

f. Apply antiseize tape to threads of plug and install.

g. Lubricate new O-ring and mating surfaces with Krytox 240 AZ. Install O-ring in adapter and install adapter into reducer housing.



Step 4g - Para 4-61

4-62. ADJUSTMENT.

4-63. ADJUSTMENT OF RELIEF VALVE. To adjust the oxygen relief valve, proceed as follows:

1. Bleed pressure to zero and remove relief valve.

2. Using relief valve adjustment tool, (paragraph 4-75), adjust valve unseating pressure by turning cap clockwise to increase relief valve pressure and counterclockwise to decrease (figure 4-15).

NOTE

For an increase in pressure, turn adjusting cap clockwise in incremental adjustments of plus 1/2 or minus 1/4 turn using relief valve adjustment tool.

For a decrease in pressure, turn adjusting cap counterclockwise in incremental adjustments of plus 1/2 or minus 1/4 turn using relief valve adjustment tool.

3. Install oxygen relief valve.

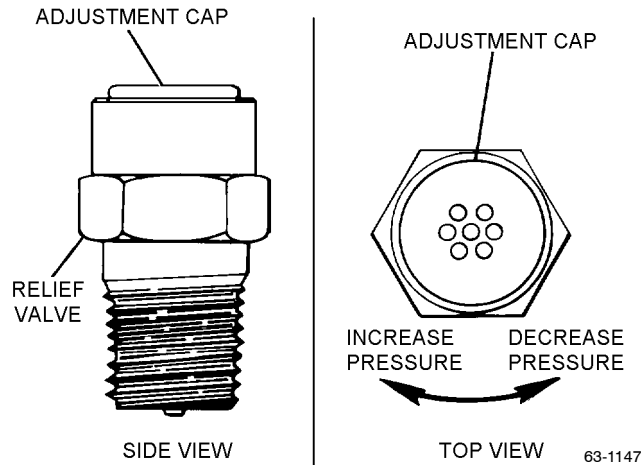


Figure 4-15. Adjustable Relief Valve (Typical)

4. Perform functional check in accordance with [paragraph 4-37](#).

4-64. ADJUSTMENT OF PRESSURE REDUCER ASSEMBLY. To adjust flow rates and outlet pressures on the reducer assembly, proceed as follows:

Support Equipment Required

Quantity	Description	Reference Number
2	Spanner Wrenches (Note 1)	T216B907-11 (Note 3)
	-or-	
2	Spanner Wrenches (Note 2)	T216C908-11 (Note 3)

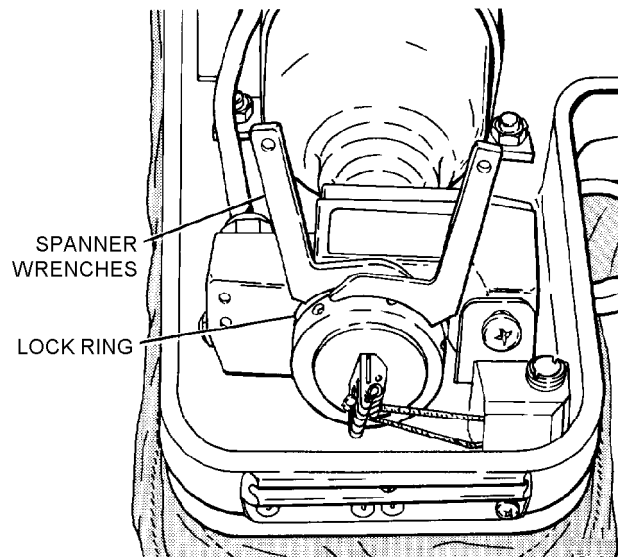
- Notes: 1. Used when pressure reducer is installed in survival kit.
 2. Used when pressure reducer is removed from survival kit.
 3. The spanner wrenches are part of Pressure Reducer Tool Set P/N T216D900-1 (CAGE 30941).

NOTE

Although the following illustrations depict adjustment of the pressure reducer installed on the upper lid assembly, procedures for a disconnected reducer are the same with

the exception of the spanner wrenches used in the adjustment procedures. See Support Equipment Required for correct spanner wrenches.

1. Using spanner wrenches, loosen pressure reducer lock ring.



Step 1 - Para 4-64

2. Turn adjusting cap counterclockwise to decrease pressure or clockwise to increase pressure.
3. Tighten pressure reducer lock ring.
4. Perform functional check on kit in accordance with [paragraph 4-37](#).

4-65. ADJUSTMENT OF LOCKS AND LID LOCK RELEASE ASSEMBLIES. If lid locks fail to release simultaneously, adjust (advance or retard) as follows:

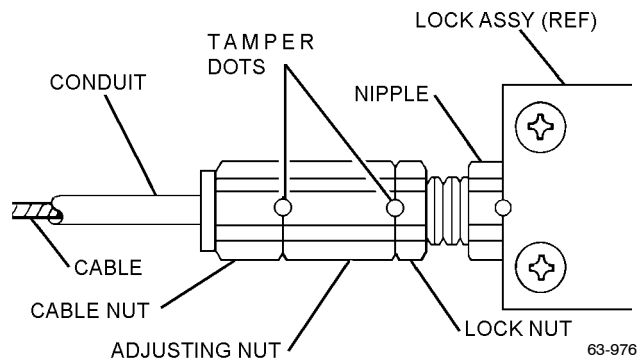
Materials Required

Quantity	Description	Reference Number
As Required	Lacquer, Fed. Std. 595	MIL-L-7178 (Note 1)

- Notes: 1. Use any contrasting color.

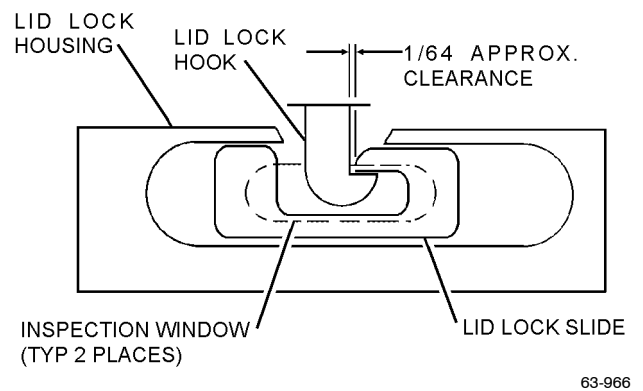
NAVAIR 13-1-6.3-2

1. To advance release operation, loosen locknut and back off adjusting nut away from assembly to desired amount.



Step 1 - Para 4-65

- 2. When desired timing is achieved, tighten locknut against adjusting nut.
- 3. To retard release operation, proceed in accordance with [steps 1](#) and [2](#), except adjusting nut is adjusted toward assembly.
- 4. Check latches for proper engagement of upper container hooks.



Step 4 - Para 4-65

NOTE

Use any contrasting color when applying tamper dots to nuts.

- 5. Apply tamper dots on nuts with lacquer.

4-72 Change 5

4-66. ADJUSTMENT OF AUTOMATIC EMERGENCY OXYGEN RELEASE ASSEMBLY. To adjust the automatic emergency oxygen release assembly, proceed as follows:

Support Equipment Required

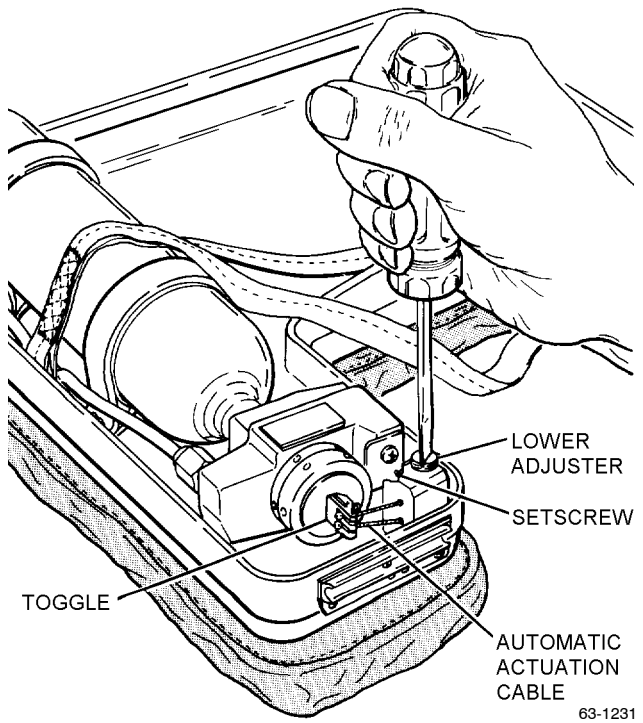
Quantity	Description	Reference Number
1	Toggle Reset Tool	Fabricate IAW paragraph 4-69

NOTE

Ensure that oxygen outlet port on manifold assembly is capped or hose assembly is installed.

Ensure that there is sufficient slack in cable so that toggle in up position is not under tension and cable balls are correctly positioned.

- 1. Loosen setscrew on oxygen release assembly.
- 2. Using screwdriver, position lower adjuster so that a minimum of slack exists in link assembly and toggle is not under tension.



Step 2 - Para 4-66

3. Engage oxygen release lanyard link with link inside lower end of adjuster.

4. Tighten setscrew.

5. Operate release assembly by pulling automatic emergency oxygen cable. Ensure that automatic emergency oxygen cable pulls free from adjuster and trips reducer toggle.

6. Engage oxygen release lanyard link with link in side lower end of adjuster, and reset toggle using toggle reset tool.

7. Operate release assembly by pulling manual oxygen release. Ensure that reducer toggle trips within a moderate amount of cable travel.

8. Reset toggle with toggle reset tool.

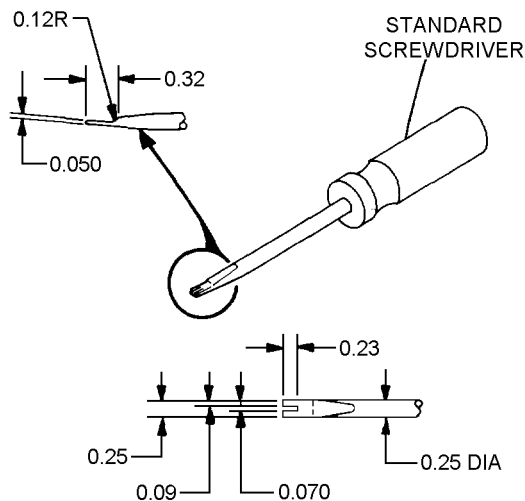
Section 4-7. Fabrication

4-67. GENERAL.

4-68. This section contains instructions for fabrication of tools and components that can be manufactured by local maintenance activities.

4-69. TOGGLE RESET TOOL. To fabricate a toggle reset tool, proceed as follows:

1. Modify a standard slot screwdriver as shown.



NOTE: ALL CORNER AND FILLET RADII 0.015

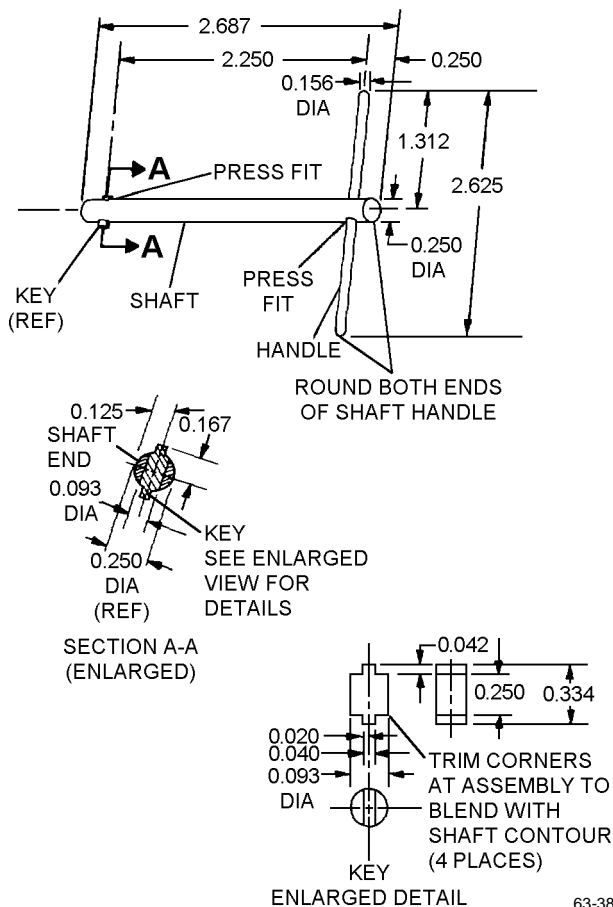
63-229

Step 1 - Para 4-69

2. Ensure that all corner and fillet radii are 0.015.

4-70. T-WRENCH. To fabricate a T-wrench, proceed as follows:

1. Fabricate wrench from steel as shown.



63-388

Step 1 - Para 4-70

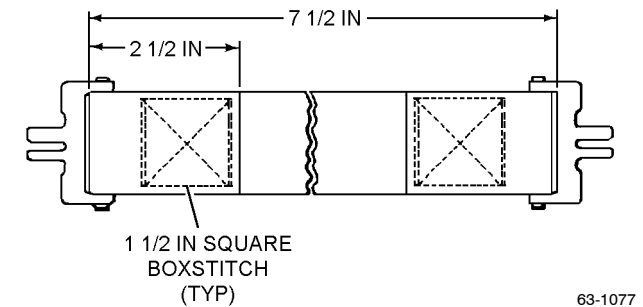
NAVAIR 13-1-6.3-2

2. Ensure that both ends of shaft handle are properly rounded.

4-71. BRAKE RIDER’S STRAP. To fabricate a brake rider’s strap, proceed as follows:

Materials Required		
Quantity	Description	Reference Number
2	Release Assembly, Lapbelt Fitting	015-11366-1 (CAGE 99449)
24 inches	Webbing, Nylon, Type XXVII, 1-23/32 inch width	MIL-W-4088 NIIN 00-530-1489
As Required	Thread, Nylon, Type II, Class A, Size 6	V-T-295 NIIN 00-559-5211

- 1. Cut a piece of nylon webbing 24 inches in length.
- 2. Sear exposed ends of webbing.
- 3. Secure fittings with 1 1/2-inch square box-stitch. All stitching shall be ASTM-D-6193, Type 301, 4 to 6 stitches per inch, and backstitch 1/2 inch minimum.



Step 3 - Para 4-71

4-72. BOOT. To fabricate a boot, proceed as follows:

Materials Required		
Quantity	Description	Reference Number
As Required	Cloth, Nylon	MIL-C-8135 -or- MIL-C-81395
As Required	Thread, Nylon, Size FF, Type I, Class A, White	V-T-295 NIIN 00-267-3024

4-74 Change 5

- 1. Construct a boot in accordance with [figure 4-16](#).
- 2. Sear exposed ends of nylon and avoid sharp edges.
- 3. All stitching shall be ASTM-D-6193, Type 301, 8 to 10 stitches per inch, and backstitch 1/2 inch minimum.

4-73. DROPLINE. To fabricate a dropline, proceed as follows:

Materials Required		
Quantity	Description	Reference Number
As Required	Webbing, 3/4-Inch Yellow	MIL-W-5625 NIIN 00-753-6531
As Required	Thread, Nylon, Size FF, Type I, Class A, White	V-T-295 NIIN 00-267-3024

- 1. Lay out webbing and position identification yarn on top before proceeding.
- 2. Fabricate a dropline in accordance with [figure 4-17](#).
- 3. Sear exposed end of webbing.
- 4. All stitching shall be ASTM-D-6193, Type 301, 8 to 10 stitches per inch, and backstitch 1/2 inch minimum.

4-74. CONTAINER ASSEMBLY PAD. To fabricate a container assembly pad P/N 253D460-1, proceed as follows:

Materials Required		
Quantity	Description	Reference Number
1	Cork	MIL-T-6841
	Adhesive Sheet, 0.062 Inch Thick	NIIN 00-551-8332

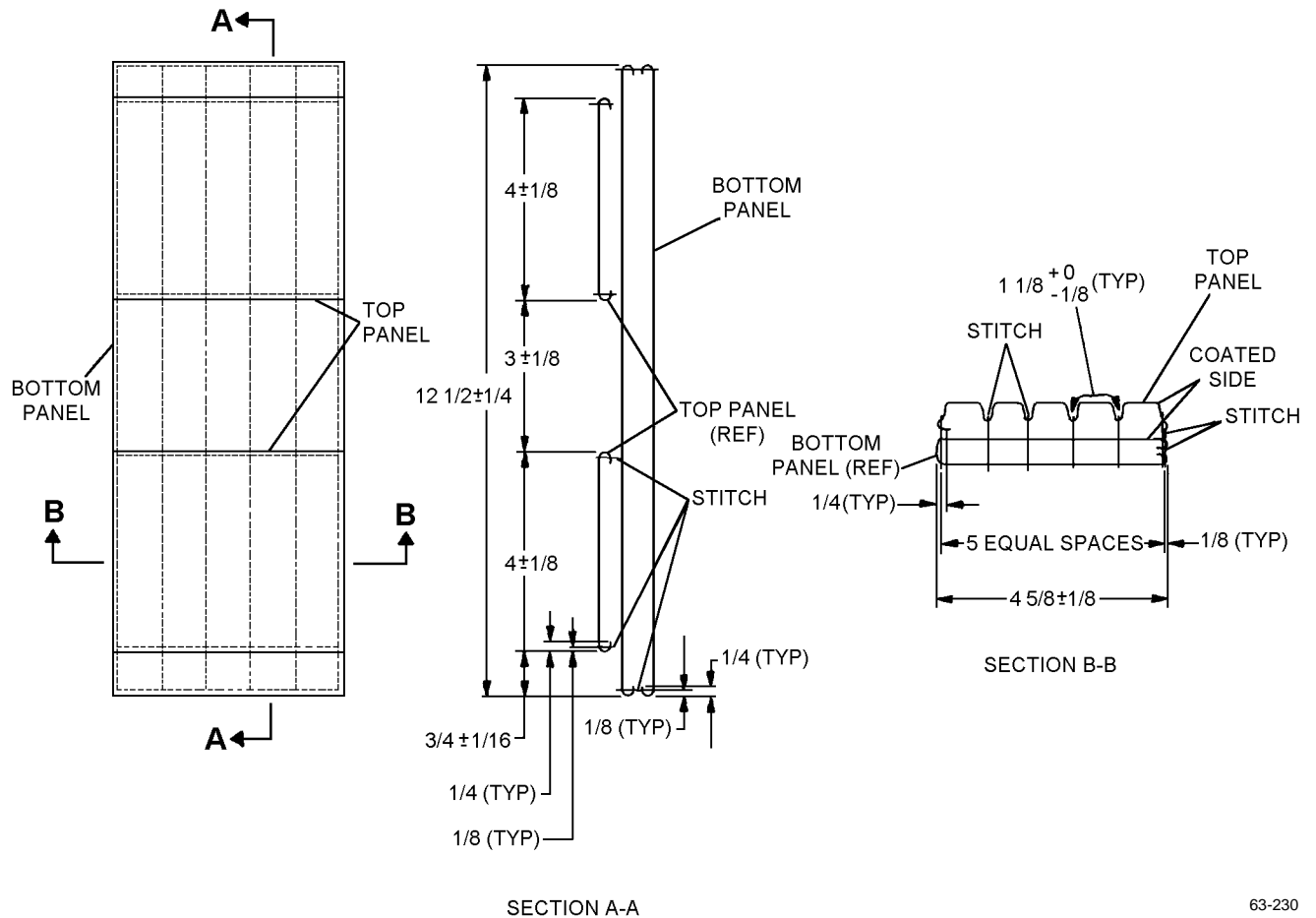


Figure 4-16. Boot

63-230

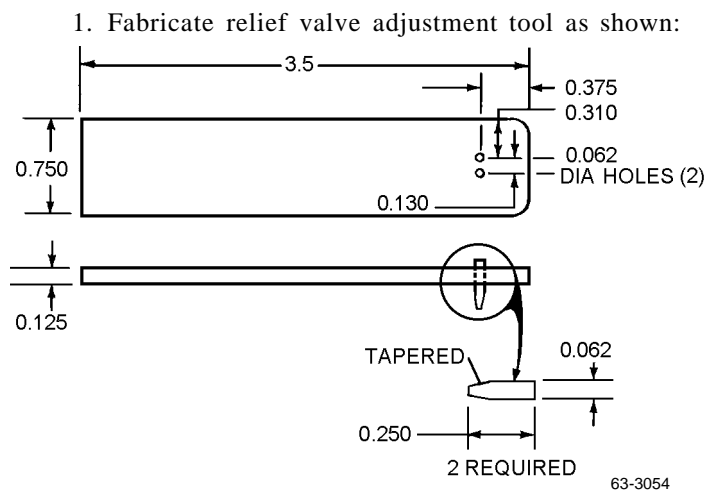
1. Fabricate a container assembly pad in accordance with [figure 4-18](#).

2. Rubber stamp part number on container assembly pad.

4-75. RELIEF VALVE ADJUSTMENT TOOL. To fabricate a relief valve adjustment tool proceed as follows:

Materials Required

Quantity	Description	Reference Number
As Required	Mild Steel 0.125 Thick	—
As Required	Drill Rod 0.062 Dia.	—



63-3054

Step 1 - Para 4-75

2. Press fit drill rod into holes in mild steel plate.

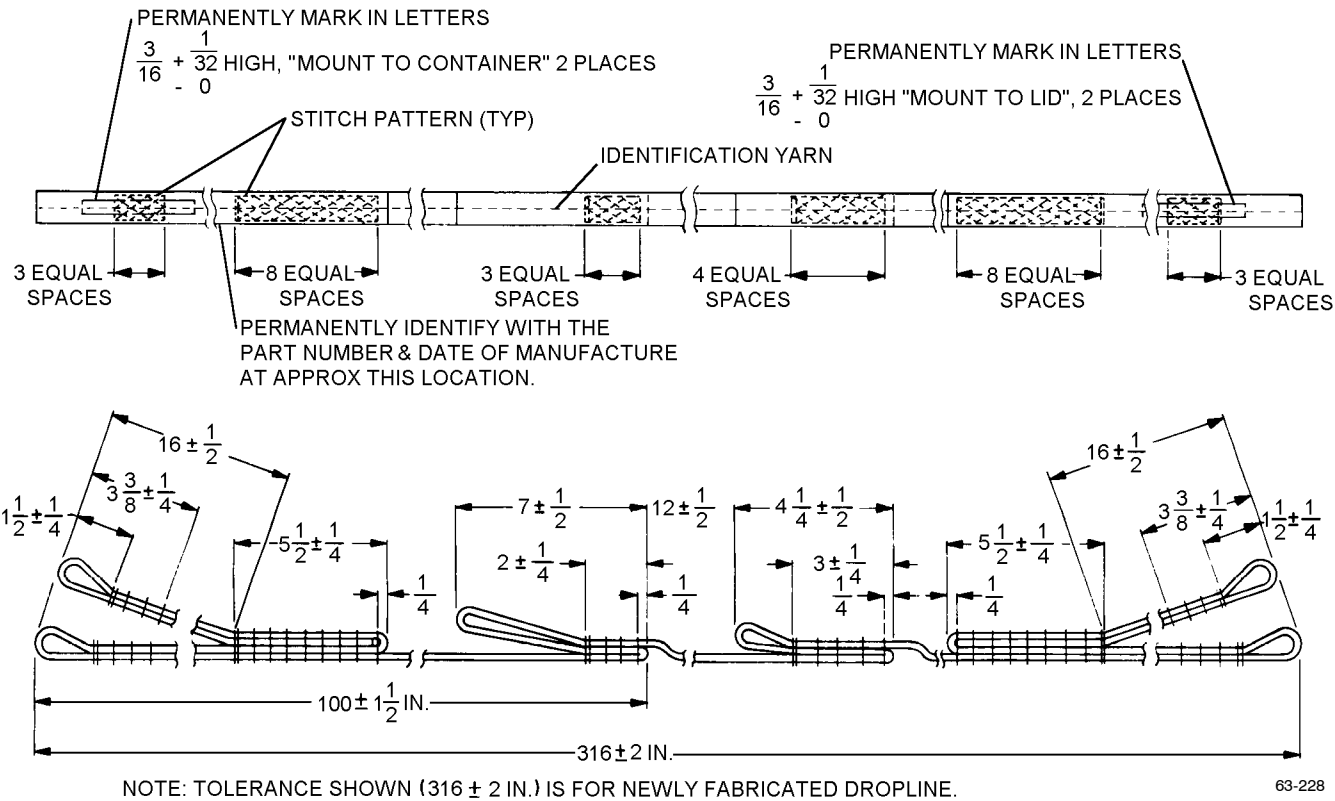


Figure 4-17. Dropline

4-76. ALTERNATE SEAT CUSHION FOAM. To fabricate a replacement foam cushion for the Seat Survival Kit, proceed as follows:

Materials Required

Quantity	Description	Reference Number
1	Disposable Razor or Knife	—
As Required	CONFOR Foam, 1 Inch Thick, CF-47100 Green or CF-45100 Blue	NIIN 01-370-6116 or NIIN 01-449-1789

1. Remove old foam from seat cushion cover.
2. Use the old foam as a template, place old foam on top of CONFOR foam.

NOTE

Ensure bulk CONFOR foam is large enough to make the new foam cushion one solid piece.

3. Trace around old foam onto the CONFOR foam, including hole for observing the emergency oxygen gage.
4. Cut CONFOR foam along the traced line.
5. Install new foam cushion into seat cushion cover. Ensure seat cushion cover fits cushion foam snugly, but does not cause bowing or excessively loose condition.
6. Write the date installed on foam with permanent marker so it can be seen easily.

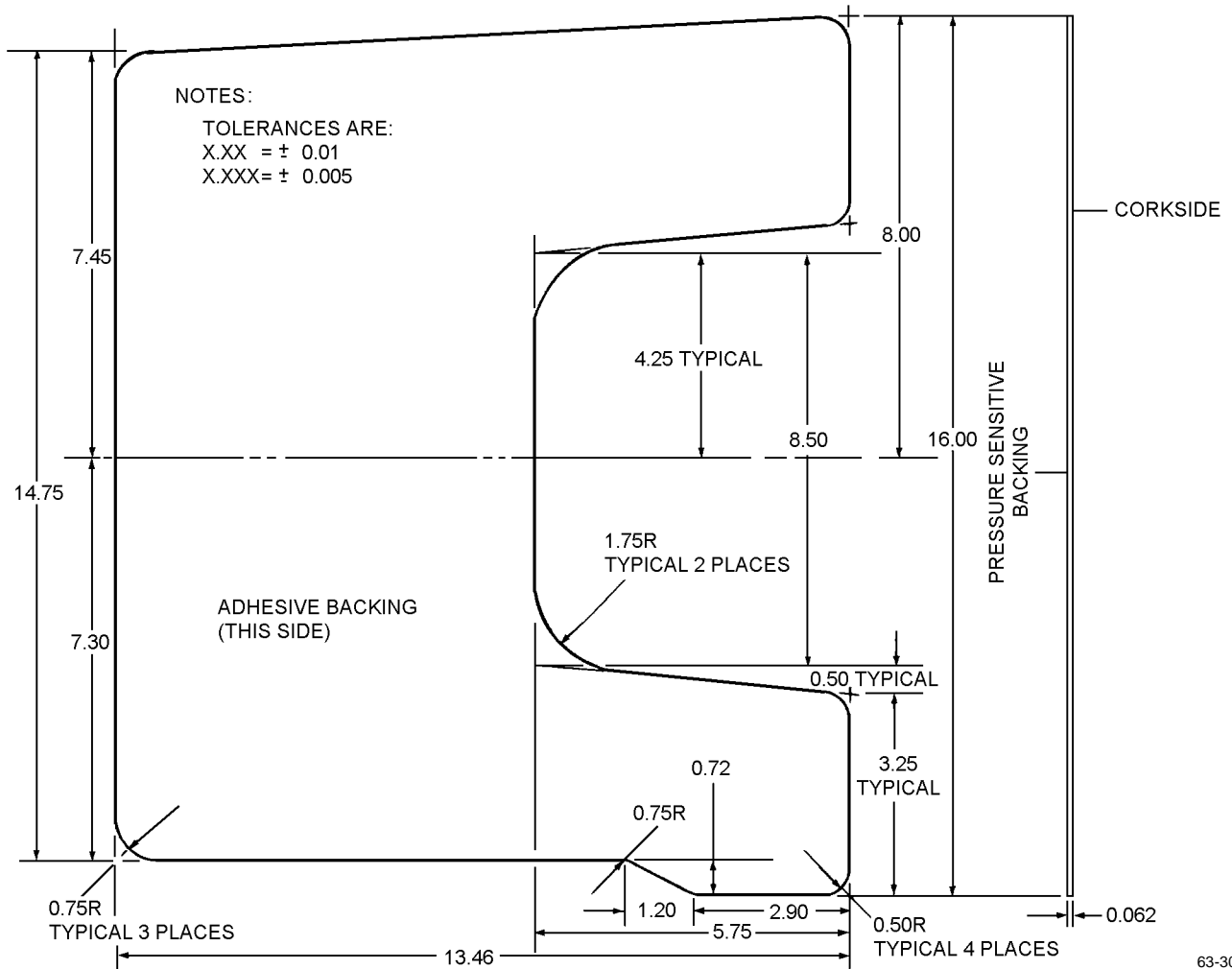


Figure 4-18. Container Assembly Pad

Section 4-8. Illustrated Parts Breakdown

4-77. GENERAL.

4-78. This section lists and illustrates the assemblies and detail parts of the SKU-3/A survival kit assembly as manufactured by East/West Industries. The entire

assembly is supplied by McDonnell Aircraft Company (CAGE 76301) and carries a P/N 74A800103-1001.

4-79. The Illustrated Parts Breakdown should be used during maintenance when requisitioning and identifying parts.

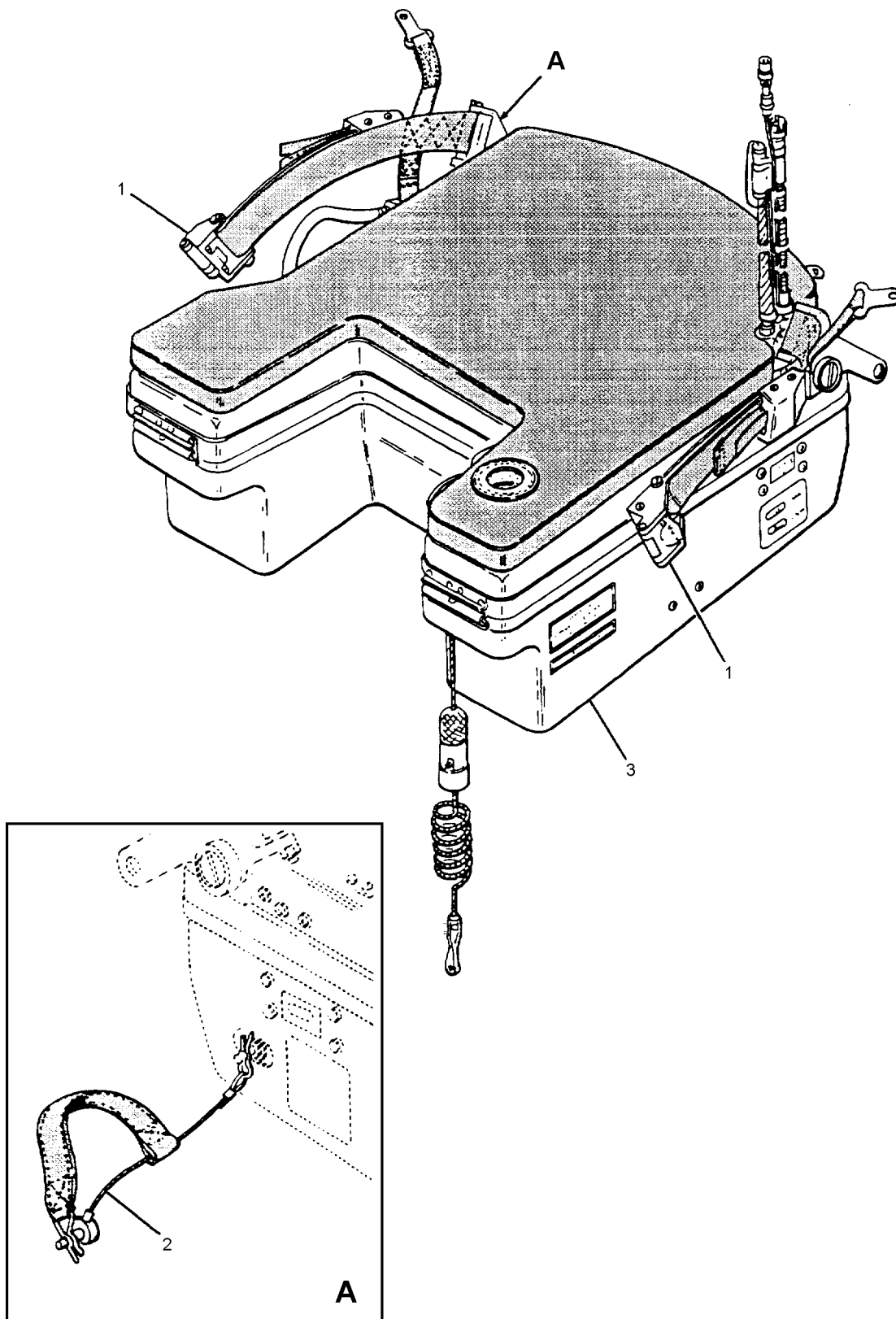
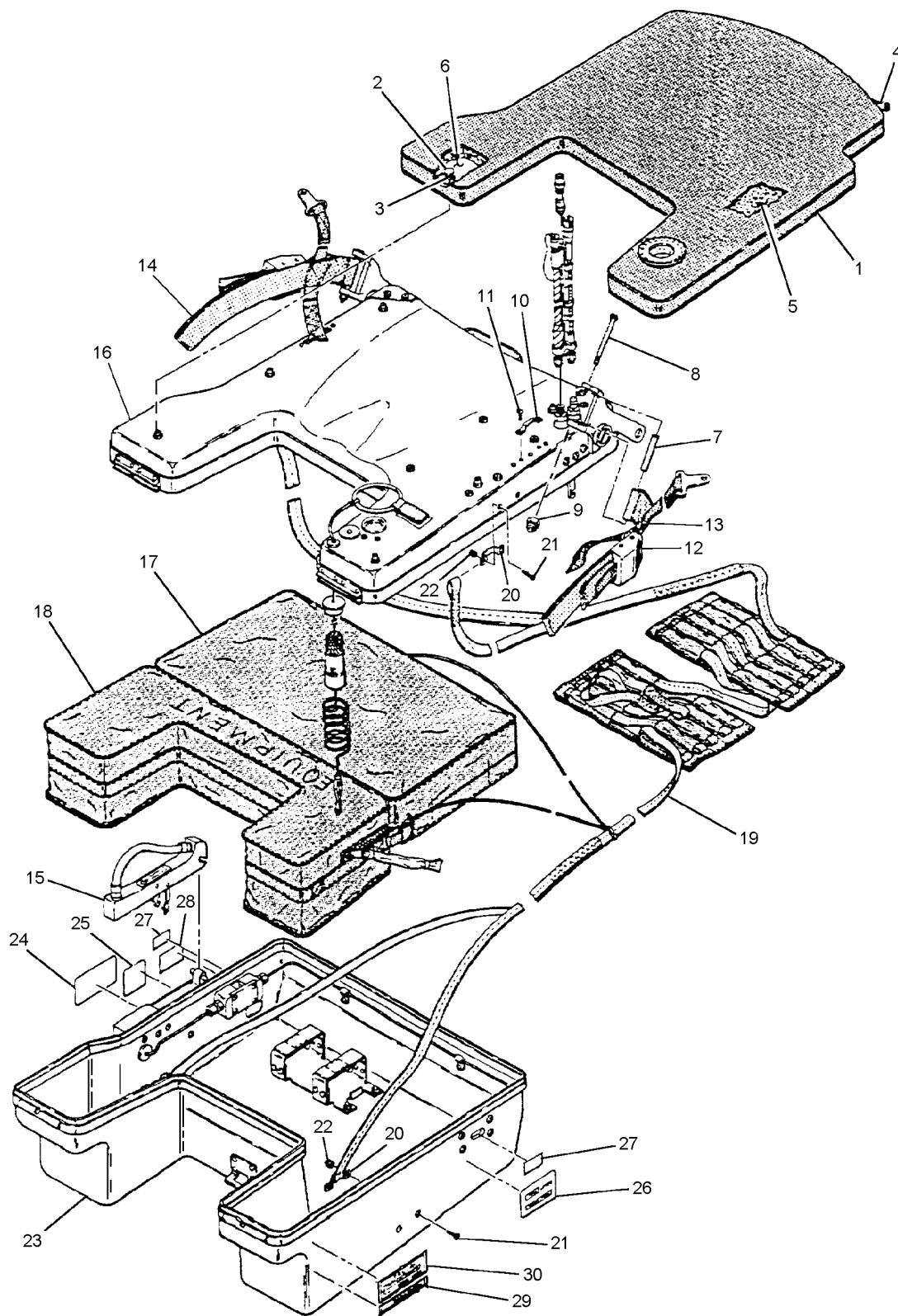


Figure 4-19. Survival Kit Assembly (SKU-3/A)

63-1232

Figure and Index Number	Part Number	Description	Units Per Assembly	Usable On Code
		1 2 3 4 5 6 7		
4-19	74A800103-1001 015-11365-1	SURVIVAL KIT ASSEMBLY, SKU-3/A (76301)	1	
		. RELEASE ASSEMBLY, Lapbelt (99449) (Note 1)	2	
	MBEU 66999-3 MBEU 66999-2	. CABLE ASSEMBLY, Beacon actuating (U1604) (Note 2)	1	
		. SURVIVAL KIT ASSEMBLY (30941) (See figure 4-20 for BKDN)	1	
	Notes: 1. When replacing lapbelt assembly, apply sealing, locking, and retaining compound, MIL-S-22473, to shoulder screws. 2. Refer to NAVAIR A1-F18AC-120-300 for ejection seat applicability.			



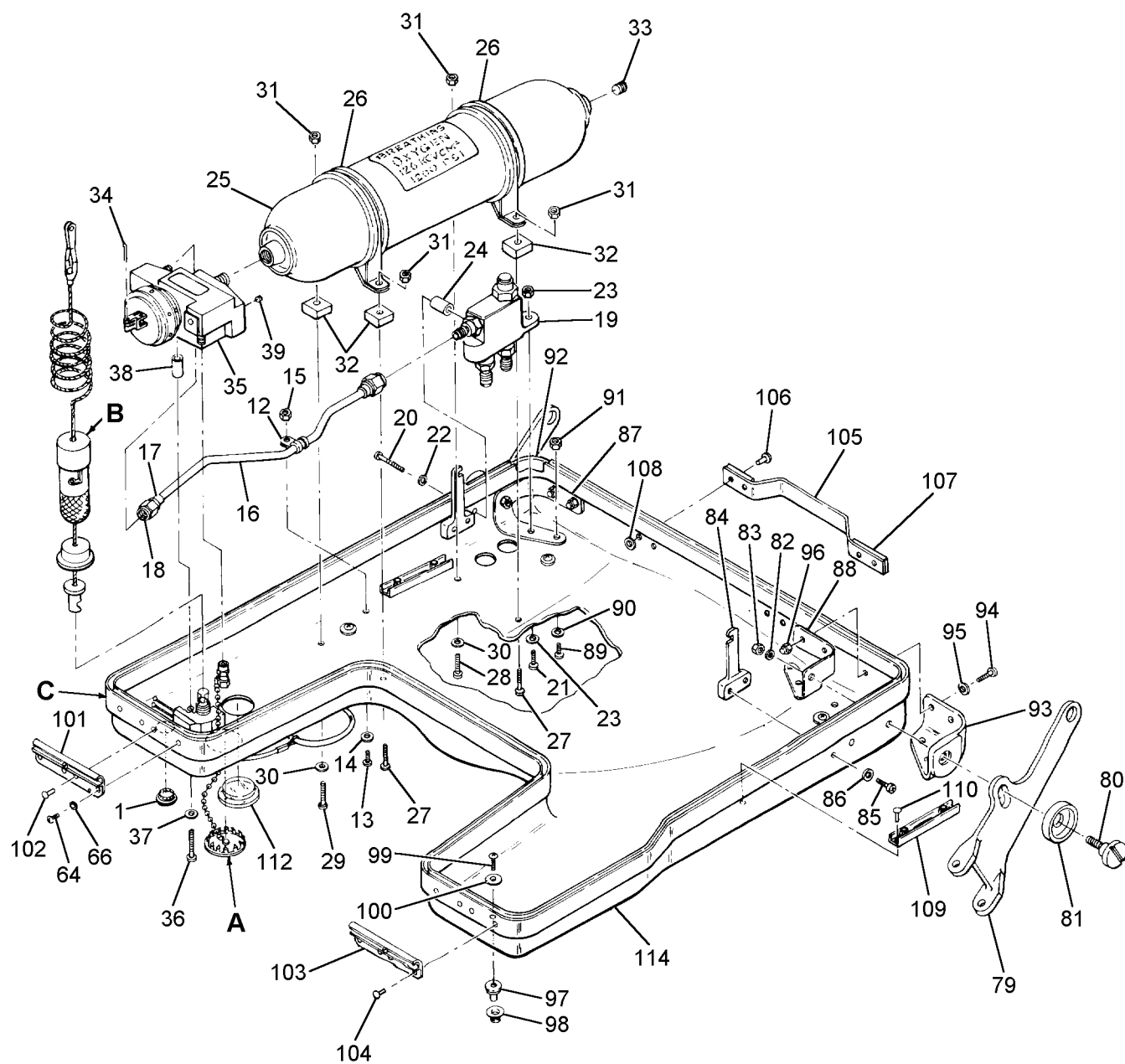
63-1233

Figure 4-20. Survival Kit Assembly Components (SKU-3/A)

Figure and Index Number	Part Number	Description 1 2 3 4 5 6 7	Units Per Assembly	Usable On Code
4-20	253J100-1	SURVIVAL KIT ASSEMBLY, SKU-3/A (30941) (See figure 4-19 for NHA)	REF	
	253D670-1	. CUSHION ASSEMBLY, Seat survival kit, A/C	1	
	253D670-3	. . COVER ASSEMBLY, Cushion	1	
-1	253D670-11	. . . COVER, Cushion (Note 1)	1	
-2	MS27983-1N	. . . BUTTON	6	
-3	MS27983-2N	. . . SOCKET	6	
-4	253D670-19	. . . FASTENER, Slide	1	
		(V-F-106, type I style no. 3, size M)		
	253D670-17	. . CUSHION PAD ASSEMBLY	1	
-5	253D670-21	. . . PAD, Cushion (Note 2)	1	
-6	253D670-23	. . . BACKING (Note 3)	1	
	253D680-1	. HARNESS ASSEMBLY, LH	1	
	253D680-2	. HARNESS ASSEMBLY, RH	1	
		(ATTACHING PARTS)		
-7	221B210-11	. ROLLER, Harness retention	2	
-8	221B691-11	. PIN, Harness retention	2	
-9	22K1-02	. NUT, Cap (82156)	2	
	EW42001	. NUT, Cap (30941)	2	
-10	102C101-13	. BRACKET	2	
-11	MS51958-62	. SCREW, (No. 10-32 x 0.438 lg)	4	
		---*---		
-12	184C100-1	. . ADJUSTER, Restraint harness	1	
-13	253D690-1	. . HARNESS ASSEMBLY, LH	1	
-14	253D690-2	. . HARNESS ASSEMBLY, RH	1	
-15	102D550-3	. HANDLE ASSEMBLY, Release	1	
-16	253J200-1	. LID ASSEMBLY (See figure 4-21 for BKDN)	1	
-17	253D610-1	. COVER, Raft	1	
-18	253D615-3	. CONTAINER ASSEMBLY, Equipment	1	
-19	36H1323-31	. LANYARD ASSY, Retaining (82156)	1	
	102D620-5	. LANYARD ASSY, Retaining (30941)	1	
		(ATTACHING PARTS)		
-20	102C101-11	. BRACKET, Footman	4	
-21	MS51960-64	. SCREW, Machine Flat hd (No. 10-32 x 0.44 lg) ...	8	
-22	22K1-02	. NUT, Cap (No. 10-32) (82156)	8	
	EW42001	. NUT, Cap (No. 10-32) (30941)	8	
		---*---		
-23	253J400-101	CONTAINER ASSEMBLY, Lower	1	
		(See figure 4-24 for BKDN) (supersedes P/N 253J400-1)		
	253J400-1	CONTAINER ASSEMBLY, Lower (superseded by P/N 253J400-101)	1	
-24	102D499-17	. LABEL, Warning	1	
-25	102D499-23	. LABEL, Instruction	1	
-26	102D499-15	. LABEL, Indicating	1	
-27	LT100TY2-500	. TAPE (L-T-100, TYPE II, 1/2-inch wide)	A/R	
-28	LT100TY2-1-250	. TAPE (L-T-100, TYPE II, 1 1/4-inch wide)	A/R	
-29	253C916-11	. NAMEPLATE	1	

NAVAIR 13-1-6.3-2

Figure and Index Number	Part Number	Description							Units Per Assembly	Usable On Code	
		1	2	3	4	5	6	7			
4-20-30	253C914-11	.	NAMEPLATE							1	
	Notes: 1. Cushion reference number (MIL-C-7219, Type III, Class 3, Sage Green) 2. Alternate cushion foam P/N CF-47100, CONFOR foam (1M331), NIIN 01-370-6116, has been authorized (see Fabrication Section 4-7). 3. Bond 253D670-23 backing to 253D6770-21 pad using MIL-C-5540 adhesive.										



63-12341

Figure 4-21. Lid Assembly (Sheet 1 of 2)

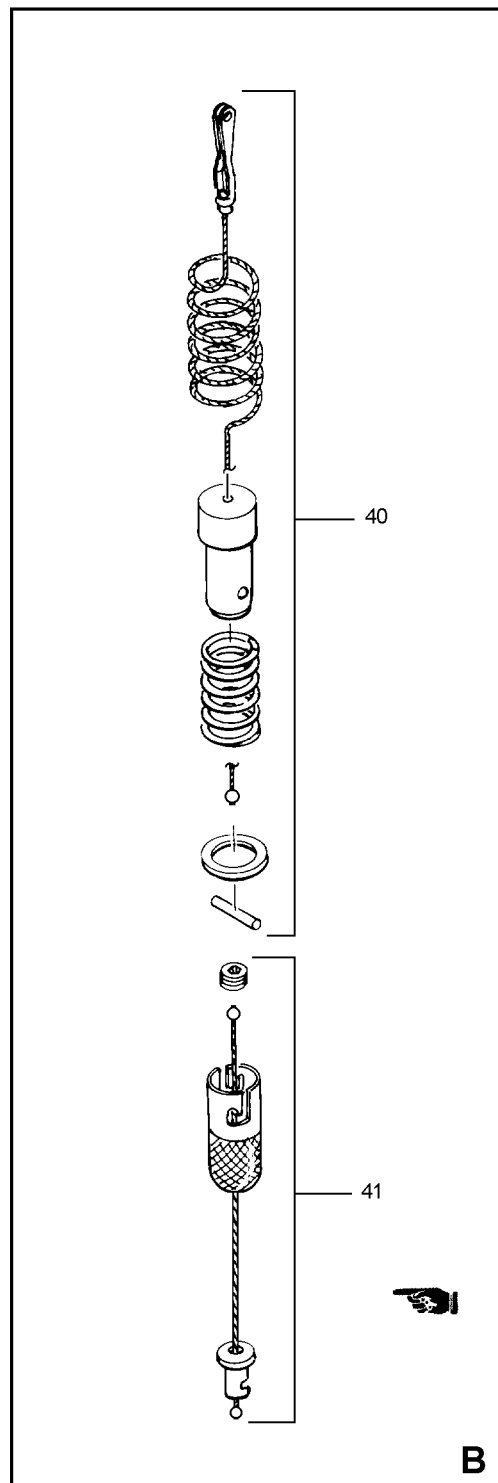
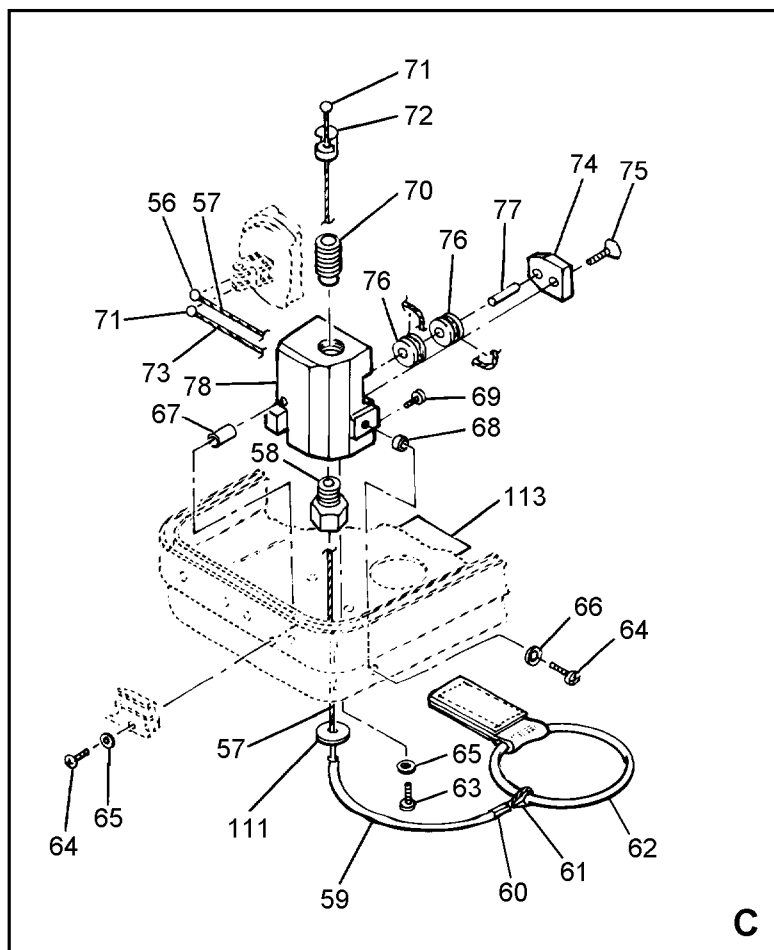
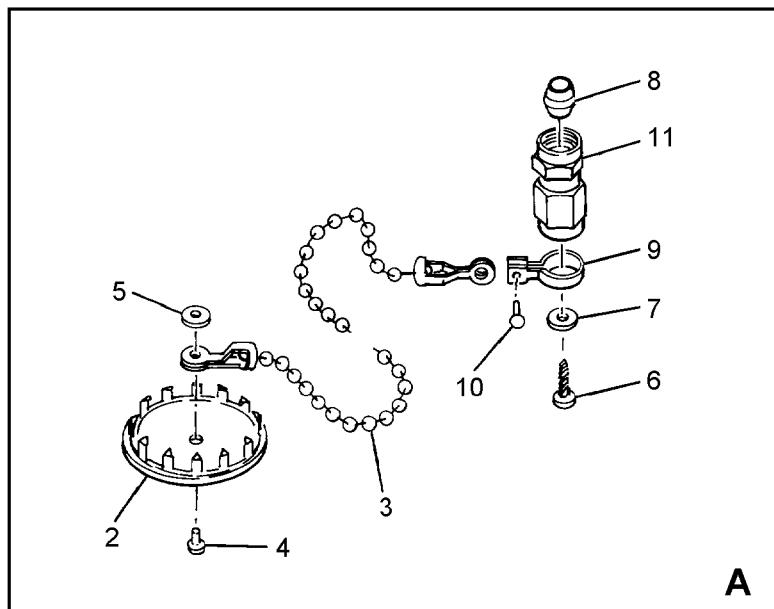


Figure 4-21. Lid Assembly (Sheet 2 of 2)

Figure and Index Number	Part Number	Description 1 2 3 4 5 6 7	Units Per Assembly	Usable On Code
4-21	253J200-1	LID ASSEMBLY (See figure 4-20 for NHA)	REF	
-1	SS51338	. PLUG (83058)	1	
	EW8001	. PLUG (30941)	1	
	221C280-1	. PLUG AND CAP ASSEMBLY	1	
-2	221B281-11	. . PLUG	1	
-3	221B283-1	. . BEAD CHAIN ASSEMBLY	1	
		(ATTACHING PARTS FOR INDEX NOS. 2, 3)		
-4	M316535-89	. . RIVET, Oval hd	1	
-5	MS15795-802	. . WASHER, Flat	1	
		---*---		
-6	COML	. . SCREW, Drive (Type U, size 4)	1	
	EW41003	. . SCREW, Drive (Type U, size 4) (30941)	1	
-7	AN960C4	. . WASHER, Flat	1	
-8	102C381-11	. . PIVOT	1	
-9	221B282-11	. . STRAP	1	
-10	MS16535-89	. . RIVET, Oval hd	1	
-11	221B382-11	. . CAP	1	
	253D355-1	. TUBE ASSEMBLY	1	
		(ATTACHING PARTS)		
-12	MS21919DG4	. CLAMP, Cushioned support	1	
-13	MS51958-63	. SCREW, Machine-pan head	1	
-14	AN960C10L	. WASHER, Flat	1	
-15	F22K1-02	. NUT, Cap (82156)	1	
	EW42001	. NUT, Cap (30941)	1	
		---*---		
-16	253D355-11	. . TUBE	1	
-17	MS20819-4D	. . SLEEVE, Flared tube fitting	2	
-18	AN818-4D	. . NUT, Coupling	2	
-19	253D317-1	. MANIFOLD ASSY	1	
		(See figure 4-22 for BKDN)		
		(ATTACHING PARTS)		
-20	MS51958-66	. SCREW, Machine-pan head	1	
-21	MS51958-65	. SCREW, Machine-pan head	1	
-22	AN960C10L	. WASHER, Flat	2	
-23	F22K1-02	. NUT, Cap (82156)	1	
	EW42001	. NUT, Cap (30941)	1	
		---*---		
-24	221B321-11	. STANDOFF	1	
-25	235D200-3	. CYLINDER, Oxygen	1	
		(ATTACHING PARTS)		
-26	NAS1716C40T	. CLAMP ASSEMBLY, Cushioned saddle	2	
-27	MS51960-65	. SCREW, Machine-flat countersunk hd	2	
-28	MS51958-64	. SCREW, Machine-pan head	2	
-29	MS51958-65	. SCREW, Machine-pan head	1	
-30	AN960C10L	. WASHER, Flat	2	

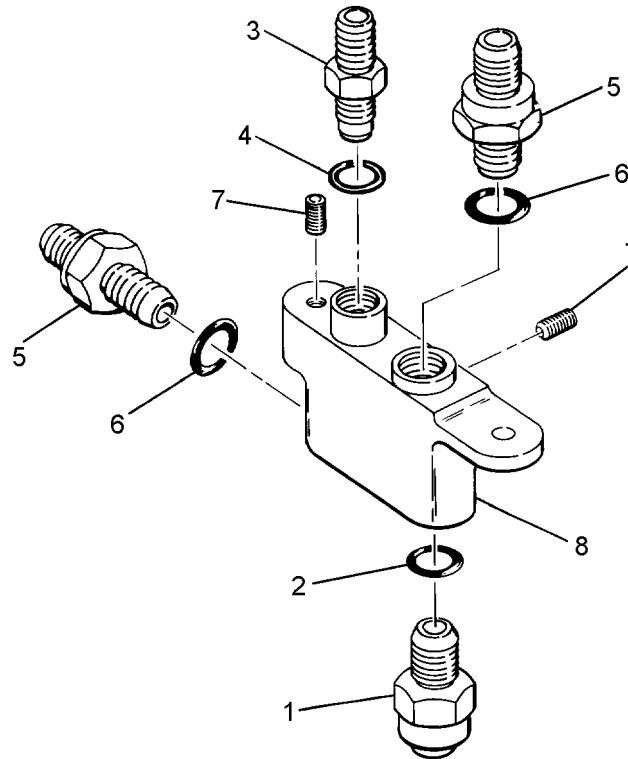
NAVAIR 13-1-6.3-2

Figure and Index Number	Part Number	Description	Units Per Assembly	Usable On Code
		1 2 3 4 5 6 7		
4-21-31	F22K1-02	. NUT, Cap (82156)	4	
	EW42001	. NUT, Cap (30941)	4	
		---*---		
-32	221B322-13	. SPACER	3	
-33	AN932S2	. PLUG, Countersink hex hd pipe	1	
-34	MS24665-88	. □ PIN, Cotter (Note 1) □	1	
-35	216D800-1	. REDUCER ASSEMBLY	1	
		(See Figure 4-23 for BDN)		
	216D800-5	. REDUCER ASSEMBLY	1	
		(See Figure 4-23 for BDN)		
		(ATTACHING PARTS)		
-36	MS51958-67	. SCREW, Machine-pan head	2	
-37	AN960C10L	. WASHER, Flat	2	
		---*---		
-38	221B321-11	. STANDOFF	2	
-39	3HP50NSS	. PLUG, Hollow hex (30780)	1	
	EW61001	. PLUG, Hollow hex (30941)	1	
-40	253C363-1	. . COUPLING ASSEMBLY, Lower lanyard	1	
-41	253C364-5	. . COUPLING ASSEMBLY, Upper lanyard	1	
-42	DELETED			
-43	DELETED			
-44	DELETED			
-45	DELETED			
-46	DELETED			
-47	DELETED			
-48	DELETED			
-49	DELETED			
-50	DELETED			
-51	DELETED			
-52	DELETED			
-53	DELETED			
-54	DELETED			
-55	DELETED			
	253C336-1	. OXYGEN CABLE ASSEMBLY, Manual	1	
-56	8-04052	. . BALL, Swage (11328)	1	
	EW54001	. . BALL, Swage (30941)	1	
-57	253C336-11	. □. □ CABLE (Note 4) □.	1	
-58	102C394-11	. □. □ ADAPTER (Note 5) □.	1	
-59	220B116-21	. . SLEEVE	1	

Figure and Index Number	Part Number	Description 1 2 3 4 5 6 7	Units Per Assembly	Usable On Code
4-21-60	28-11B4	. . SLEEVE, Oval (76691)	1	
	EW54005	. . SLEEVE, Oval (30941)	1	
-61	220B116-13	. . LOOP	1	
-62	220C102-1	. . RING ASSEMBLY	1	
	253D392-1	. OXYGEN RELEASE ASSEMBLY (ATTACHING PARTS)	1	
-63	AN515C4R5	. SCREW, Round hd (Note 5)	1	
-64	AN515C4R12	. SCREW, Round hd (Note 5)	2	
-65	AN960C4L	. WASHER, Flat	2	
-66	NAS620-5L	. WASHER ---*---	1	
-67	253B398-11	. STANDOFF	1	
-68	253B398-13	. STANDOFF	1	
-69	MS18063-1	. . SETSCREW (-4-40 x .125 lg)	1	
-70	102C388-11	. . ADJUSTER	1	
	253C395-1	. . LINK ASSEMBLY, Automatic release	1	
-71	8-04052	. . . BALL, Swage (11328)	2	
	EW54001	. . . BALL, Swage (30941)	2	
-72	102C395-15	. . . LINK, Terminal	1	
-73	253C395-11	. . . CABLE (Note 3)	1	
-74	102C389-11	. . COVER, Pulley recess	1	
-75	MS24693-S3	. . SCREW, Machine (Note 5)	1	
-76	102C391-11	. . PULLEY	2	
-77	MS9164-066	. . PIN	1	
-78	102D393-11	. . HOUSING, Machined	1	
-79	253C645-11	. FITTING, Rear (ATTACHING PARTS)	2	
-80	253B646-11	. PIN, Rear attachment	2	
-81	221B648-11	. WASHER, Anti-chafe	2	
-82	K19301-4	. WASHER, Self-aligning (15653)	2	
	EW43001	. WASHER, Self-aligning (30941)	2	
-83	H19300-4	. NUT, Self-aligning (15653)	2	
	EW42007	. NUT, Self-aligning (30941) ---*---	2	
-84	230C535-15	. LATCH, Lid (ATTACHING PARTS)	2	
-85	MS51958-63	. SCREW, Machine-pan head (Note 5)	4	
-86	AN960C10L	. WASHER, Flat ---*---	4	
-87	253C241-11	. PLATE, LH	1	
-88	253C243-11	. PLATE, RH (ATTACHING PARTS FOR INDEX NOS. 87, 88)	1	
-89	MS51958-64	. SCREW, Machine-pan head	3	
-90	AN960C10L	. WASHER, Flat	3	
-91	F22K1-02	. NUT, Cap (82156)	3	
	EW42001	. NUT, Cap (30941) ---*---	3	

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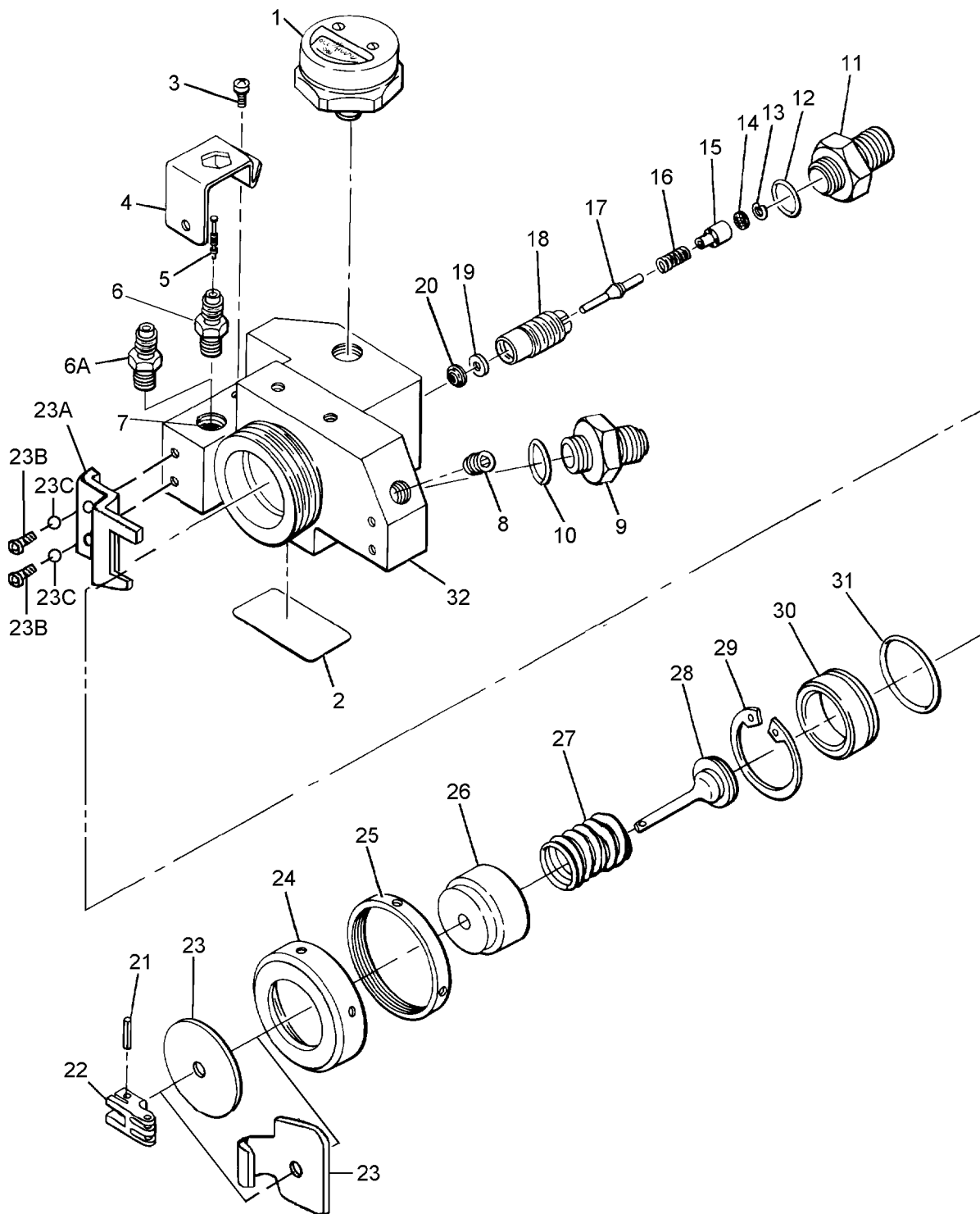
Figure and Index Number	Part Number	Description	Units Per Assembly	Usable On Code
		1 2 3 4 5 6 7		
4-21-92	253C640-11	. BRACKET, LH	1	
-93	253C642-11	. BRACKET, RH	1	
		(ATTACHING PARTS FOR INDEX NOS. 92, 93)		
-94	MS51958-63	. SCREW, Machine-pan head	4	
-95	AN960C10L	. WASHER, Flat	4	
-96	F22K1-02	. NUT, Cap (82156)	4	
	EW42001	. NUT, Cap (30941)		
		---*---		
-97	MS27983-5N	. FASTENER, Eyelet	6	
-98	MS27983-3N	. FASTENER, Stud	6	
		(ATTACHING PARTS FOR INDEX NOS. 97, 98)		
-99	TBD	. SCREW, Pan head (3-56 UNF-2A x 3/8)	6	
	EW41002	. SCREW, Pan head (3-56 UNF-2A x 3/8)	6	
		(30941)		
-100	NAS620-5L	. WASHER	6	
		---*---		
-101	102D125-1	. HINGE ASSEMBLY, LH	1	
		(ATTACHING PARTS)		
-102	MS20470AD3-8	. RIVET, Solid-universal hd	3	
		---*---		
-103	102D125-5	. HINGE ASSEMBLY, RH	1	
		(ATTACHING PARTS)		
-104	MS20470AD3-8	. RIVET, Solid-universal hd	4	
		---*---		
-105	221B710-11	. HANDLE, Carrying	1	
		(ATTACHING PARTS)		
-106	MS20470A4-9	. RIVET, Solid-universal hd	4	
-107	221B711-11	. RETAINER, Handle	2	
-108	AN960C4	. WASHER, Flat	4	
		---*---		
-109	102C281-11	. PLATE, Backup	2	
-110	MS20470AD3-5	. RIVET, Solid-universal hd	6	
		---*---		
-111	102B334-11	. PLUG, Protective	1	
-112	204B201-11	. WINDOW, Gage	1	
-113	220C114-17	. PILE	1	
-114	253J222-1	. LID ASSEMBLY, Machined	1	
	Notes: 1. Install cotter pin in accordance with MS33540. 2. Deleted. 3. Deleted. 4. Make from Cres, 7 x 7, 0.074 inch diameter cable, CAGE 13792. 5. Apply VC-3 (CAGE 04866) thread locking compound to 50 percent of threads.			



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Figure 4-22. Manifold Assembly

Figure and Index Number	Part Number	Description	Units Per Assembly	Usable On Code
4-22	253D317-1	MANIFOLD ASSEMBLY (See Figure 4-22 for NHA)	REF	
-1	EW63004 P103-673	RELIEF VALVE (30941) (Note 2)	1	
		RELIEF VALVE (91816) (Alternate for EW63004)	1	
-2	MS9068-012	O-RING	1	
-3	221B320-11	NIPPLE, Union manifold	1	
-4	MS9068-011	O-RING	1	
-5	3104AS100-1	CHECK VALVE (Note 2)	2	
-6	MS9068-012	O-RING	2	
-7	MS21209F1-15	HELICAL COIL INSERT (Note 1)	2	
-8	253D319-11	MANIFOLD BODY	1	
Notes:		1. Install Heli-coil insert per MS33537 or equivalent. 2. Torque to a value of 70 ± 5 in-lbs.		



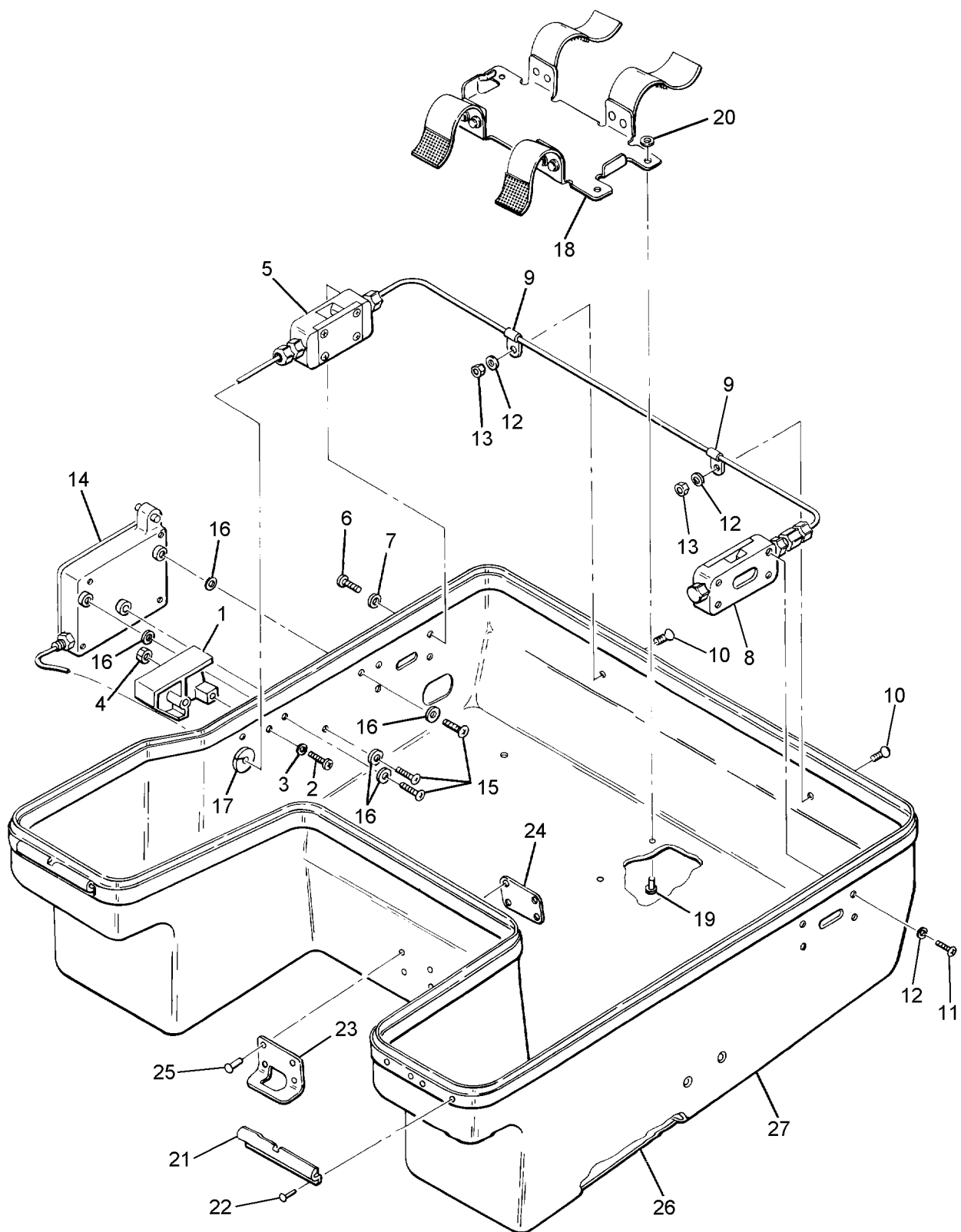
63-936

Figure 4-23. Reducer Assembly

Figure and Index Number	Part Number	Description 1 2 3 4 5 6 7	Units Per Assembly	Usable On Code
4-23	216D800-1	REDUCER ASSEMBLY (See Figure 4-21 for NHA)	REF	A
	216D800-5	REDUCER ASSEMBLY (30941) with toggle modification incorporated (Note 7)	REF	B
-1	MIL-G-7601A EW68001	. OXYGEN GAGE, Type L-2 OXYGEN GAGE, Type L-2 (30941)	1 1	
-2	216B826-11 216B826-15	. PLATE IDENTIFICATION PLATE IDENTIFICATION	1 1	A B
-3	MS35206-225	. SCREW, Machine-pan head (Note 2)	2	
-4	221C870-11 221B380-1	. RETAINER VALVE ASSEMBLY, Filler (Note 1)	1 1	
-5	EW63001	. . VALVE CORE (30941)	1	
-6	102C383-11	. . BODY VALVE	1	
-7	204B419-11	. FILTER	1	
-8	AN932S1	. PLUG, Counter-sink hex head pipe (Note 1)	1	
-9	MS21900-J4	. ADAPTER	1	
-10	MS9068-012	. O-RING (Note 3)	1	
-11	221B840-11	. NIPPLE UNION	1	
-12	MS9068-011	. O-RING (Note 3)	1	
-13	MS16625-4025	. RING, Retaining	1	
-14	102B819-11	. FILTER (Note 4)	1	
-15	102B818-11	. GUIDE, Poppet	1	
-16	102B814-11	. SPRING, Poppet	1	
-17	102B817-11	. POPPET	1	
-18	102C815-11	. RETAINER (Note 5)	1	
-19	102B828-11	. STOP, Back-up ring	1	
-20	102B816-11	. SEAT (Note 5)	1	
-21	MS171435	. SPRING PIN	1	
-22	221C303-15	. TOGGLE	1	
-23	233B823-11 233D341-11	. SPACER SPACER, Anti-cocking	1 1	A B
-23A	—	. BRACKET, Anti-rotation (ATTACHING PARTS)	1	B
-23B	—	. SCREW	2	B
-23C	—	. WASHER ---*---	2	B
-24	233C829-11	. CAP, Adjust	1	
-25	233C830-11	. LOCK RING	1	
-26	233C820-11	. GUIDE, Piston	1	
-27	233B831-11	. SPRING, Reference	1	
-28	102C824-11	. PLUNGER	1	
-29	N5000-102H EW48001	. RETAINING RING (79136) RETAINING RING (30941)	1 1	
-30	102C821-11	. PISTON	1	
-31	MS28775-117	. O-RING (Note 3)	1	
-32	216D811-11	. REDUCER BODY	1	

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Figure and Index Number	Part Number	Description 1 2 3 4 5 6 7	Units Per Assembly	Usable On Code
		Notes: 1. To assemble pipe threaded parts use Teflon tape 1/2-in. wide conforming to MIL-T-27730 coating to be applied according to instructions specified in MIL-T-27730. 2. Apply VC-3 (CAGE 04866) thread locking compound to screw threads. 3. Lubricate packings and mating surfaces with KRYTOX 240 AZ (CAGE 82348) fluorinated grease. 4. Install coarse mesh near side. 5. Torque retainer to 32 to 35 inch-pounds during assembly. 6. Position face of seat against V notch of stop. 7. This configuration is a manufacturer modification and not a requirement.		



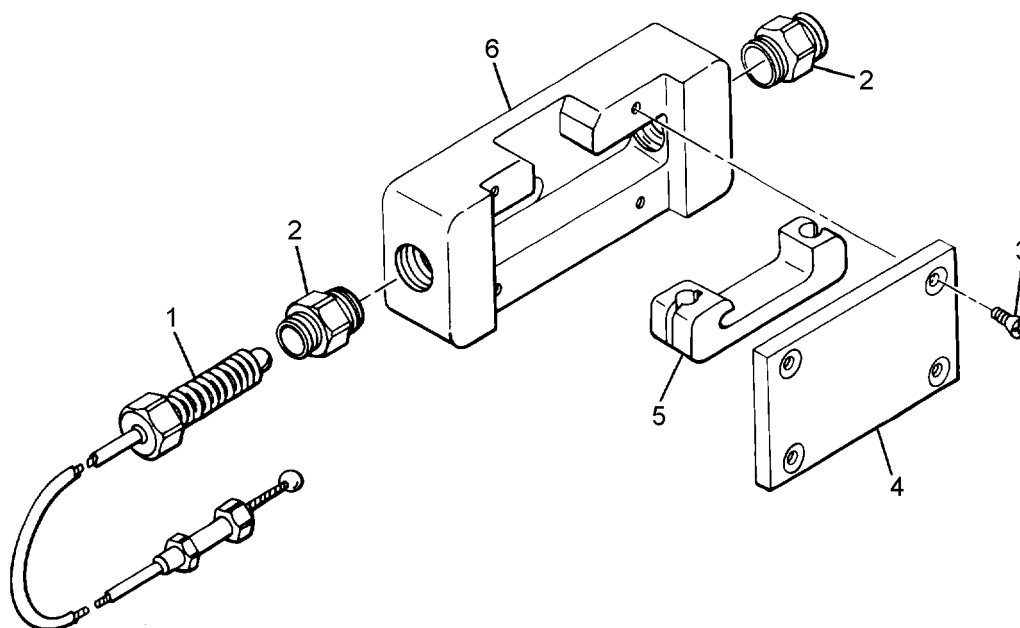
63-1236

Figure 4-24. Lower Container Assembly

Figure and Index Number	Part Number	Description 1 2 3 4 5 6 7	Units Per Assembly	Usable On Code
4-24	253J400-101	CONTAINER ASSEMBLY, Lower (See figure 4-20 for NHA) (supersedes P/N 253J400-1)	REF	
	253J400-1	CONTAINER ASSEMBLY, Lower (superseded by P/N 253J400-101)	REF	
-1	234C450-11	. HANDLE PROTECTOR (ATTACHING PARTS)	1	
-2	MS35206-232	. SCREW	2	
-3	AN960C4	. WASHER	2	
-4	MS21042-06	. NUT	2	
		---*---		
-5	221C540-1	. LOCK ASSEMBLY, RH (See figure 4-25 for BKDN) (ATTACHING PARTS)	1	
-6	MS51958-62	. SCREW (No. 10-32 x 0.438 lg)	4	
-7	AN960C10L	. WASHER	4	
		---*---		
-8	253C520-1	. LOCK ASSEMBLY, LH (See figure 4-26 for BKDN)	1	
-9	MS25281-F2	. CLAMP, Loop plastic	2	
-10	MS51960-65	. SCREW	2	
-11	MS51958-62	. SCREW (No. 10-32 x 0.438 lg)	4	
-12	AN960C10L	. WASHER	6	
-13	22K1-02	. NUT (82156)	2	
	EW42001	. NUT (30941)	2	
		---*---		
-14	221D580-1	. LID LOCK RELEASE ASSEMBLY (See figure 4-27 for BKDN) (ATTACHING PARTS)	1	
-15	MS51958-62	. SCREW (No. 10-32 x 0.438 lg)	3	
-16	AN60C10L	. WASHER	5	
		---*---		
-17	MS35489-34	. GROMMET, Rubber	1	
-18	102D450-3	. RADIO BRACKET ASSEMBLY (ATTACHING PARTS)	1	
-19	MS20426A4-6	. RIVET, Solid countersunk (0.125 dia x 0.375 lg)	4	
-20	AN960C4	. WASHER	4	
		---*---		
-21	102D125-13	. HINGE (ATTACHING PARTS)	2	
-22	MS20470AD3-8	. RIVET, Solid hd	8	
		---*---		
-23	BX20042	. FITTING, Negative-g (Note 1)	1	A
	253C413-11	. FITTING, Negative-g (Note 2)	1	B
-24	253B423-13	. PLATE, Back-up (Note 1)	1	A
	253B423-11	. PLATE, Back-up (Note 2) (ATTACHING PARTS FOR INDEX NOS. 23, 24)	1	B
-25	MS20470AD4-7	. RIVET, Solid-universal hd (Note 1)	3	A
	MS20470AD4-7	. RIVET, Solid-universal hd (Note 2)	4	B
		---*---		

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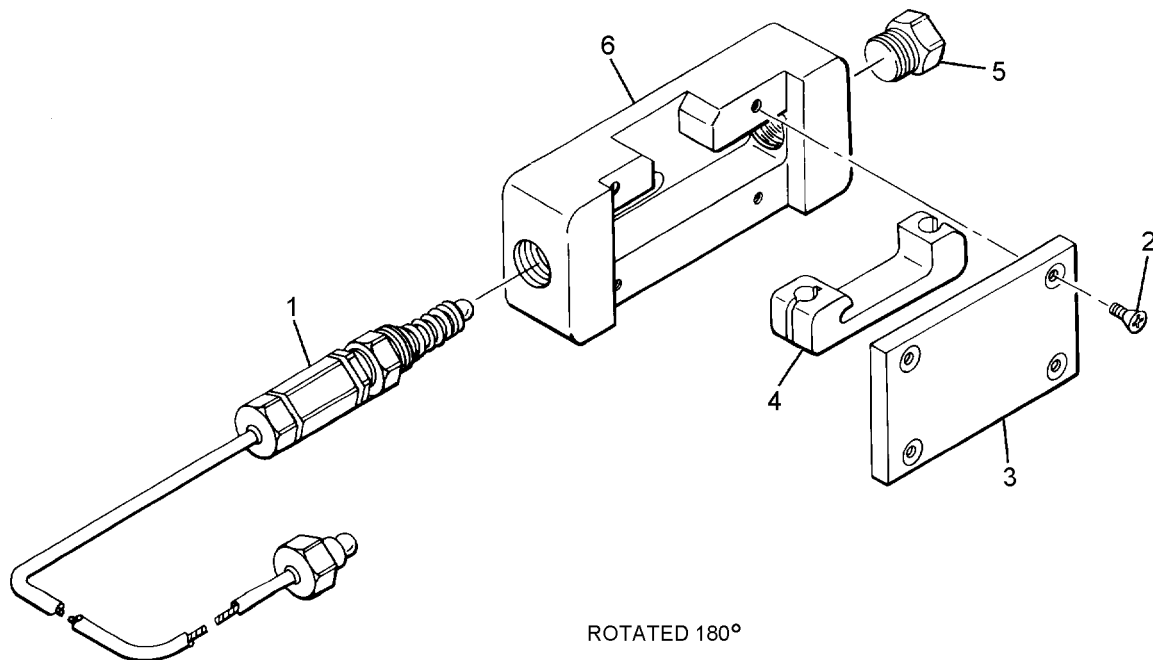
Figure and Index Number	Part Number	Description 1 2 3 4 5 6 7	Units Per Assembly	Usable On Code
4-24-26 -27	253D460-11	. PAD	1	
	253J422-1	. CONTAINER, Machined	1	
	Notes: 1. Components with Usable On Code A may be found on SKU-3/A Survival Kits with serial no. 001 thru 0044. 2. Components with Usable On Code B may be found on SKU-3/A Survival Kits with serial no. 0045 thru 9999.			



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Figure 4-25. Lock Assembly RH

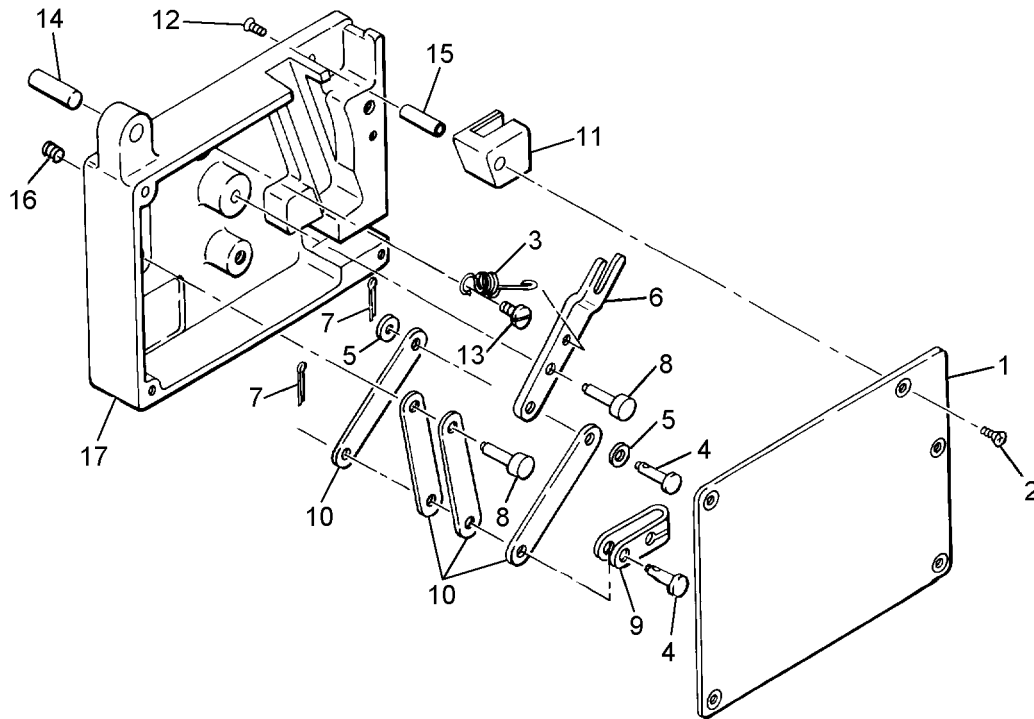
Figure and Index Number	Part Number	Description	Units Per Assembly	Usable On Code
		1 2 3 4 5 6 7		
4-25	221C540-1	LOCK ASSEMBLY, RH (See figure 4-24 for NHA)	REF	
-1	221D560-1	. CABLE ASSEMBLY, Right	1	
-2	102C527-13	. NIPPLE	2	
-3	MS24693-C3	. SCREW, Flat head (No. 4-40 x 0.312 lg) (Note 1)	4	
-4	102C523-11	. COVER (Note 2)	1	
-5	221C522-11	. SLIDE	1	
-6	102C519-1	. HOUSING ASSEMBLY	1	
		Notes: 1. After final adjustments to lock assemblies, apply VC-3 (CAGE 04866) thread locking compound to screw threads and install cover. 2. Install cover loosely.		



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Figure 4-26. Lock Assembly LH

Figure and Index Number	Part Number	Description	Units Per Assembly	Usable On Code
		1 2 3 4 5 6 7		
4-26	253C520-1	LOCK ASSEMBLY, LH (See figure 4-24 for NHA)	REF	
-1	253C570-1	. CABLE ASSEMBLY, Rear	1	
-2	MS24693-S3	. SCREW, Flat head (No. 4-40 x 0.312 lg) (Note 1)	4	
-3	102C523-11	. COVER (Note 2)	1	
-4	221C522-11	. SLIDE	1	
-5	102C526-11	. PLUG	1	
-6	102C519-1	. HOUSING ASSEMBLY	1	
		Notes: 1. After final adjustments to lock assemblies, apply VC-3 (CAGE 04866) thread locking compound to screw threads and install cover. 2. Install cover loosely.		



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Figure 4-27. Lid Lock Release Assembly

Figure and Index Number	Part Number	Description	Units Per Assembly	Usable On Code
		1 2 3 4 5 6 7		
4-27	221D580-1	LID LOCK RELEASE ASSEMBLY	REF	
		(See figure 4-24 for NHA)		
-1	102C597-11	. COVER (Note 1)	1	
		(ATTACHING PARTS)		
-2	MS24693-C3	. SCREW, Flat head (4-40) (Note 2)	5	
		---*---		
-3	102C584-11	. SPRING, Toggle	1	
-4	MS9462-05	. PIN, Clevis	2	
-5	AN960C6	. WASHER, Flat	2	
-6	102C583-13	. LEVER, Actuating	1	
-7	MS24665-1011	. PIN, Cotter (0.312 lg)	2	
-8	102C596-11	. PIN, Pivot (0.312 dia x 0.06 lg)	2	
-9	221C581-13	. CLEVIS	1	
-10	102C582-11	. LINK TOGGLE	4	
-11	102C589-11	. GUIDE	1	
	102C588-1	. HOUSING INSERT ASSEMBLY	1	
-12	MS24693-S3	. . SCREW, Flat head (4-40) (Note 3)	1	
-13	COML	. . SCREW (70318) (No. 4-40 UNC-3A	1	
		x 0.312 in. lg) (Note 3)		
	EW41001	. . SCREW (4-4 UNC-3A x 0.312 in. lg)	1	
		(30941) (Note 3)		
-14	MS9390-421	. . PIN, Straight (Dia 0.252 x 0.05 lg)	1	
-15	102C594-11	. . STANDOFF	1	

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Figure and Index Number	Part Number	Description 1 2 3 4 5 6 7	Units Per Assembly	Usable On Code
4-27-16 -17	MS21209F1-15	. . . HELICAL COIL INSERT (For no. 10 x 32 x 0.0285 lg) (Note 4)	3	
	102D587-11	. . . HOUSING, Machined lid lock release (Note 5)	1	
	Notes: 1. Install cover loosely. 2. After final adjustments, apply VC-3 (CAGE 04866) thread locking compound to screw threads and install cover. 3. Apply VC-3 (CAGE 04866) thread locking compound to screw thread. 4. Install Heli-coil inserts per MS33537 and remove tangs. 5. Apply 5306 (CAGE 85932) solid film lubricant per MIL-L-8937 to toggle link contact surfaces.			

NUMERICAL INDEX

Part Number	Figure and Index Number	SM&R Code
AN515C4R12	4-21-64	PAGZZ
AN515C4R5	4-21-63	PAGZZ
AN818-4D	4-21-18	PAGZZ
AN932S1	4-23-8	PAGZZ
AN932S2	4-21-33	PAGZZ
AN960C6	4-27-5	
AN960C10L	4-21-14	PAGZZ
	4-21-22	
	4-21-30	
	4-21-37	
	4-21-86	
	4-21-90	
	4-21-95	
	4-24-12	
	4-24-16	
	4-24-7	
AN960C4	4-21-108	PAGZZ
	4-21-7	
	4-24-20	
	4-24-3	
AN960C4L	4-21-65	PAGZZ
BX20042	4-24-23	
COML	4-21-6	
	4-27-13	
EW41001	4-27-13	
EW41002	4-21-99	
EW41003	4-21-6	
EW42001	4-21-15	
	4-21-23	
	4-21-31	
	4-21-91	
	4-21-96	
	4-24-13	
EW42007	4-21-83	
EW43001	4-21-82	
EW48001	4-23-29	
EW51005	4-21-42	
EW54001	4-21-56	
	4-21-71	
EW54005	4-21-60	
EW61001	4-21-39	
EW63001	4-23-5	PAGZZ
EW63004	4-22-1	PAGZZ
EW68001	4-23-1	
EW8001	4-21-1	
F22K1-02	4-21-15	PAGZZ
	4-21-23	

Part Number	Figure and Index Number	SM&R Code
F22K1-02	4-21-31	
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